


DEPARTMENT OF ENERGY, MINES AND RESOURCES
Ottawa

# GULF OF ST. LAWRENCE and SCOTIAN SHELF



June 9 to September 22, 1967

## No. 8

1969 Data Record Series

## Canadian Oceanographic Data Centre

Programmed by the
Canadian Committee on Oceanography

1969

Requests for copies should be sent to:

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Catalogue No. M58 – 1/1969 – 8

The Queen's Printer
Ottawa, Canada
1969

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DEPARTMENT OF ENERGY, MINES AND RESOURCES
and
FISHERIES RESEARCH BOARD OF CANADA

# GULF OF ST. LAWRENCE and SCOTIAN SHELF

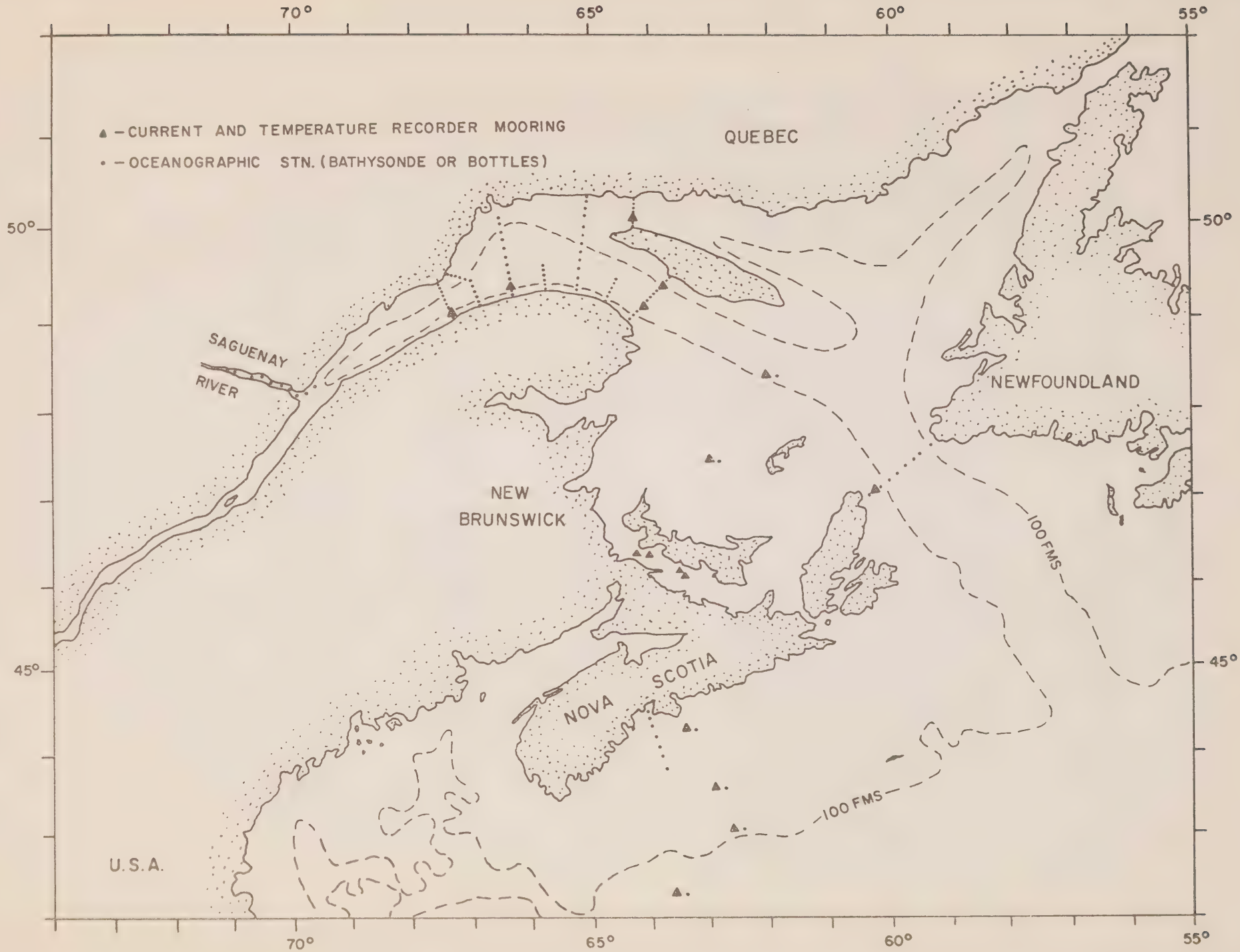
| | |
|---|---|
| Ship: | MV "Theta" |
| Local cruise designation: | BI 1867 |
| CODC cruise reference no: | 10-67-007 |
| Cruise period: | June 9 - September 22, 1967 |
| Officer-in-Charge: | D. Dobson |
| Observers: | F.D. Ewing<br>L. Guptill<br>F.K. Keyte<br>D.J. Lawrence |

ATLANTIC OCEANOGRAPHIC LABORATORY
and
MARINE ECOLOGY LABORATORY

Bedford Institute, Dartmouth, N.S.

# SECTION I

## Description of data collection procedures


70°
65°
60°
55°
▲ – CURRENT AND TEMPERATURE RECORDER MOORING
• – OCEANOGRAPHIC STN. (BATHYSONDE OR BOTTLES)
QUEBEC
50°
SAGUENAY
RIVER
NEWFOUNDLAND
NEW
BRUNSWICK
100 FMS
45°
NOVA SCOTIA
100 FMS
U.S.A.

# INTRODUCTION

This cruise covers the activities of the MV "Theta" for a good part of the 1967 charter season. It can be conveniently broken down into several phases.

## Phase I (9-28 June)

This was primarily to study water properties in the Gulf of St. Lawrence from Cabot Strait to the Saguenay River. Current and temperature recorders were moored at 8 sites in the Gulf and 4 in Northumberland Strait. Most of the temperature-salinity data were collected by means of a Kieler Howaldtswerke bathysonde and are not reported here. A single Knudsen bottle was sometimes put just above the bathysonde for calibration purposes. These data are reported here as are those from complete bottle stations which were done during periods when the bathysonde was not operational. During the middle of Phase I, a series of stations was done along the Saguenay River, at which dissolved oxygen measurements were included. Surface samples were not taken here, and this has prevented the Canadian Oceanographic Data Centre's computer program from doing interpolated and integrated quantities. This covers stations 001-006, 018-043, 046-051, 053 and 054 in this report.

## Phase II (5-10 July)

Current and temperature recorders were laid at 4 sites on the Scotian Shelf off Halifax. Bottle stations were done at these sites. This covers stations 52-55 in this report. A network of bathysonde stations was then done on the Scotian Shelf.

## Phase III (12-28 July)

A network of bathysonde stations was done in the Gulf of St. Lawrence including a 24-hour anchor station, and most of the current and temperature recorders were taken up. No bottle stations were done.

## Phase IV (5-22 September)

On this phase (stations 56-80) extending over the Gulf of St. Lawrence, Scotian Shelf and St. Margaret's Bay areas, bathysonde and bottle observations were made and current meters recovered. Salinity samples were taken for stations 64-80 but the data cannot be found.

## OBSERVATIONAL PROCEDURES

Temperature and salinity data were collected in single casts, using Knudsen-type reversing bottles. Sampling depths varied with the area being worked. Thermometers manufactured by Yoshino and by Richter & Weise were used, two of the protected type per bottle, with an additional unprotected usually being used on each bottle below 350 metres.

Salinities were run on an Auto-Lab salinometer at the Bedford Institute and the tables supplied with it were used to convert conductivity ratio to salinity.

## PERSONNEL

At Sea:

| | |
|---|---|
| D. Dobson | Officer-in-Charge |
| J.P. Budlong | FRB |
| W. Elliot | DEMR |
| F.D. Ewing | DEMR |
| T.R. Foote | DEMR |
| L. Guptill | Summer Assistant |
| D. Guptill | Summer Assistant |
| F.K. Keyte | DEMR |
| D.J. Lawrence | DEMR |
| E.A. Lewis | DEMR |
| S.B. McHughen | DEMR |
| W.J. MacNeil | DEMR |
| A.E. Swyers | FRB |
| G.B. Taylor | FRB |

Data Analyses at Bedford Institute

| | |
|---|---|
| Compilation of data: | F.K. Keyte<br>D.J. Lawrence |
| Salinity determinations: | E.A. Verge<br>W. Young |

# SECTION II

## Description of the machine-generated data record

# INTRODUCTION

This section applies to the machine processing phase of the data reduction and computation.

The oceanographic data previously recorded on CODC data summary forms, a sample of which is shown on the next page, are transferred to punch-cards for subsequent electronic data processing on an IBM 1620 computer, using CODC's OCEANS II program. In addition to computing routine derived quantities, the program carries out unit and format conversions, range checks, plausibility tests, internal editing, and if required, interpolation at standard oceanographic depths. When interpolations are carried out, additional derived values are computed.

After the data have been processed, the data record is prepared using an IBM 1401 computer configuration with the OCEAN REPORT III program, which provides for pre-edited high speed print-out on continuous direct-image masters. These masters subsequently yield the required volume of copies for distribution.

Provision has been made to enter an "**estimate of precision**" for each observed variable selected for interpolation at standard oceanographic depths. The precision depends on the instrument and/or technique used to determine the variable. A standard precision stated as a **standard deviation** ($\sigma$) can be determined for each instrument or technique under routine field conditions by making duplicate determinations of the variables for a homogeneous sample of sea water. These standard deviations are given for each cruise under "GENERAL INFORMATION" in section III of the data record.

The **measurement error estimate** of a specific observation in this data record, is stated as a multiple of the standard deviation derived as above, and entered in a column immediately to the right of the reported variable. In order to distinguish it from an additional decimal digit, the measurement error estimate is recorded alphabetically, (i.e., $1\sigma$ = A, $2\sigma$ = B, etc.; in this data record "A" is suppressed).

An option is provided with respect to the measurement of the salinity variable. If observed to three decimal digits, the last digit takes the place of the measurement error estimate.

In the past, a number of methods for both manual and machine interpolation have been developed. Studies and comparisons of the several methods have shown that no single method is universally acceptable. The manual methods are the most elaborate and flexible, but often require subjective decisions. In machine interpolation, all the present methods fail to yield acceptable results under some circumstances. Hence, it is considered necessary to qualify interpolated values by stating an "**interpolation error estimate**" derived from the particular interpolation formula used. There are two purposes in stating the error estimates; **first**, to give an indication of the quality of the interpolated data; **second**, to allow the oceanographer to redesign his observational procedures in order to reduce interpolation errors in future observations.

The interpolation scheme chosen for the OCEANS II program consists of a combination of two 3-point interpolations using the Lagrangian interpolation polynomial, as recommended by Rattray (1962). A parabola is fitted through three values of a given variable (T, S, $O_2$) considered as a function of depth. The two interpolation parabolas require a total of four points (observed depths). The middle points are common to both parabolas. The average of the two values obtained from the parabolas at standard depth is taken as the interpolated value, and a function of their difference as an estimate of the interpolation error.

This function combined with the "**measurement error estimate**" comprises the "**combined measurement and interpolation error estimate**". It is expressed as a multiple of the standard deviation of measurement ($\sigma$) under normal routine field conditions by:

# CANADIAN OCEANOGRAPHIC DATA CENTRE

## MASTER

| 1 IDENT. CODE | 2 LATITUDE (N=+) | 3 LONGITUDE (W=+) | 5 DATE | 6 TIME | 7 DEPTH | 9 NO. DEPTHS OBS'D. | VESSEL |
|---|---|---|---|---|---|---|---|
| COUNTRY INST. | — DEG.° MIN. 1/10 | — DEG.° MIN. 1/10 | YEAR MONTH DAY | HOURS G.M.T. 1/10 | — TO BOTTOM | | ENTERED BY / CHECKED BY |
| 1 8 | | | | | | | |
| 1 2 3 4 | 5 6 7 8 9 | 10 11 12 13 14 15 | 19 20 21 22 23 24 | 25 26 27 | 28 29 30 31 | 34 35 | |

| 10 WATER | 11 WAVES I | 12 WAVES II | 13 WIND | 14 BAROMETER | 15 AIR TEMP. | 16 WET BULB | 17 W.W. CODE | 18 CLOUD | 19 VIS. | 20 HOURS AFTER H.W. | 21 UNASSIGNED | 22 CRUISE REFERENCE NUMBER | 23 CONSEC. NUMBER | 24 CARD TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| COLOUR TRANS. | Dw Dw Pw Hw | Dw Dw Pw Hw | DIR. — FORCE SPEED | — 1/10 | — 1/10 | — 1/10 | (SEPT. 62) | TYPE AMT. | | | | | | 1 |
| 36 37 38 39 | 40 41 42 43 | 44 45 46 47 | 48 49 50 51 | 52 53 54 | 55 56 57 | 58 59 60 | 61 62 | 63 64 | 65 | 66 67 | 68 69 70 71 72 73 | 74 75 76 | 77 78 79 | 80 |

## OBSERVED CARD

| | 6 TIME HOURS G.M.T. | 1/10 | 7 DEPTH OF SAMPLE | e | 8 — TEMPERATURE | e | 9 SALINITY | d/e | 10 — OXYGEN | e | 13 $PO_4$ - P | 14 TOTAL - P | 15 $NO_2$ - N | 16 $NO_3$ - N | 17 $SIO_3$ - SI | 18 P.H. | CARD TYPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | 3 |
| 2 | | | | | | | | | | | | | | | | | 3 |
| 3 | | | | | | | | | | | | | | | | | 3 |
| 4 | | | | | | | | | | | | | | | | | 3 |
| 5 | | | | | | | | | | | | | | | | | 3 |
| 6 | | | | | | | | | | | | | | | | | 3 |
| 7 | | | | | | | | | | | | | | | | | 3 |
| 8 | | | | | | | | | | | | | | | | | 3 |
| 9 | | | | | | | | | | | | | | | | | 3 |
| 10 | | | | | | | | | | | | | | | | | 3 |
| 11 | | | | | | | | | | | | | | | | | 3 |
| 12 | | | | | | | | | | | | | | | | | 3 |
| 13 | | | | | | | | | | | | | | | | | 3 |
| 14 | | | | | | | | | | | | | | | | | 3 |
| 15 | | | | | | | | | | | | | | | | | 3 |
| 16 | | | | | | | | | | | | | | | | | 3 |
| 17 | | | | | | | | | | | | | | | | | 3 |
| 18 | | | | | | | | | | | | | | | | | 3 |
| 19 | | | | | | | | | | | | | | | | | 3 |
| 20 | | | | | | | | | | | | | | | | | 3 |
| | 25 26 27 | | 28 29 30 31 | 32 | 33 34 35 36 | 37 | 38 39 40 41 | 42 | 43 44 45 46 | | 55 56 57 | 58 59 60 | 61 62 63 | 64 65 66 | 67 68 69 | 70 71 72 | 80 |

$$\frac{\sigma_i}{\sigma} = \left\{ \frac{(\Delta V_i)^2}{\sigma^2} + \sum_{n=j-2}^{j+1} (\gamma_n)^2 \left(\frac{\sigma_n}{\sigma}\right)^2 \right\}^{1/2}$$ , where

$\sigma$ = Standard deviation of the combined error estimates at standard oceanographic depth,

$\Delta V_i$ = the interpolation error estimate of variable "V" at standard oceanographic depth = $\frac{1}{3}(V_{i_1} - V_{i_2})$

$\gamma$ = Interpolation polynomial coefficient.

$Z_j$ = Observed depth.

$Z_i$ = Standard oceanographic depth, such that: $Z_{j-2} < Z_{j-1} < Z_i < Z_j < Z_{j+1}$

The integral part of the fraction $\frac{\sigma_i}{\sigma}$, if $\geq 2$, is reported in this Data Record following the interpolated variable. It represents the **combined measurement and interpolation error estimate**. In order to distinguish it from an additional decimal digit, it is recorded alphabetically (e.g.: 2 as "B", 3 as "C", etc.).

With respect to the interpolated value of the salinity variable if reported to three decimal digits, the **interpolation error estimate** is given only when $\frac{\sigma_i}{\sigma} \geq 2$ (the salinity is then recorded to two decimal places). If less than 2, the mean obtained from the two interpolation parabolas is reported to three decimal places.

## EXPLANATION OF DATA RECORD HEADINGS

MASTER HEADINGS

| | | | | | |
|---|---|---|---|---|---|
| *(1) C-REF-NO* | *(6) YR* | *(11) DEPTH* | *(16) WAVES 1* | *(21) AIR T* | *(26) VIS* |
| *(2) CONS. NO* | *(7) MONTH* | *(12) MXSAMPD* | *(17) WAVES 2* | *(22) WET B* | *(27) STN* |
| *(3) LAT* | *(8) DAY* | *(13) NO. DPTH* | *(18) WND-DIR* | *(23) ww-CODE* | |
| *(4) LON* | *(9) HR* | *(14) W-COLOR* | *(19) WND-FCE* | *(24) CLD-TPE* | |
| *(5) MARSD SQ* | *(10) C/I* | *(15) W-TRNSP* | *(20) BARO* | *(25) CLD-AMT* | *(28) HW* |

(1) CRUISE REFERENCE NUMBER: Assigned by the Institute. Commences with 001 at the beginning of each year (effective Jan. 1, 1963). Prior to that date the CRN was a number designated by CODC.

(2) CONSECUTIVE NUMBER: Indicates the chronological order in which the stations were occupied.

(3) LATITUDE:

(4) LONGITUDE: Indicate the position of the platform at the time of observation.

(5) MARSDEN SQUARE: Designates the geographic area code of the observation (see Marsden square chart).

(6) YEAR:

(7) MONTH:

(8) DAY:

(9) HOUR: The time (Greenwich Mean Time) at which the surface environmental data were recorded. It is reported to tenths of hours (Table 1).
If an "X" precedes the value for HOUR, (prior to Jan. 1, 1963) it indicates that the reported time is doubtful.

(10) COUNTRY/INSTITUTE: The International Geophysical Year (IGY) Country Code/Institute Code - see Table 11.

(11) DEPTH: The sounding reported in metres. If corrected, this is stated in the "GENERAL INFORMATION" chapter of section III. Charted depths are preceded by the letter "C".

(12) MAXIMUM SAMPLING DEPTH: A code to indicate the deepest sampling depth (used for high speed sorting).

00 m - 50 m = 00
51 m - 150 m = 01
151 m - 250 m = 02
etc.

(13) NUMBER OF DEPTHS: The number of levels observed (this is entered to initiate a computer safety check, guarding against the loss of punch-cards).

(14) WATER COLOUR: A code based on the percentage of yellow (see table 2 and Note under FIELD "15" below).

(15) WATER TRANSPARENCY: The depth in metres at which a Secchi disc (white disc, 30 cm. in diameter) just disappears from view, or the optical density expressed in percentage;

NOTE: The "GENERAL INFORMATION" chapter in section III of the data record will state which method was used.

(16) WAVES 1 ($d_W d_W P_W H_W$-code): The direction, period and height of the **wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.

(17) WAVES 2 ($d_W d_W P_W H_W$-code): The direction, period and height of the predominant **non-wind-propagated** wave system. (See Tables 3, 4 and 5). Ref: World Meteorological Organization Codes 0885, 3155, 1555.

(18) WIND DIRECTION: The true direction to the nearest 10 degrees from which the wind is blowing (wind direction 990 means:—wind variable or direction unknown).

(19) WIND FORCE (WND-FCE): Beaufort notation (See Table 6).

WIND SPEED (WND-SPD): Anemometer reading reported in metres per second. Instrument height reported in "GENERAL INFORMATION" chapter of section III.

(20) BAROMETER: The barometric pressure reported in millibars: the "GENERAL INFORMATION" chapter in Section III of the data record will state the type of instrument used.

(21) AIR TEMPERATURE: In degrees Celsius.

(22) WET BULB: In degrees Celsius.

(23) ww CODE: Present Weather Code (See Table 7). Ref: WMO Code 4677

(24) CLOUD TYPE: The type of predominating clouds (See Table 8). Ref: WMO Code 0500.

(25) CLOUD AMOUNT: The sky coverage in eighths (See Table 9) Ref: WMO Code 2700

(26) VISIBILITY: Visibility at the surface (See Table 10). Ref: WMO Code 4300.

(27) STATION: A station reference number, assigned by the institute prior to, or during the survey.

(28) HOURS AFTER HIGH WATER: Indicates the state of the tide for nearshore observations.

OBSERVED DATA HEADINGS

*(1) GMT* *(2) DEPTH* *(3) TEMP* *(4) SAL* *(5) OXYGEN* *(6) SGMT*
*(7) SOUND* *(8) $PO_4$* *(9) -P-* *(10) $NO_2$* *(11) $NO_3$* *(12) $SiO_3$* *(13) pH.*

**NOTE: Headings (1) to (7) will always be present. Headings (8) to (13) appear only when one or more additional chemical entries were made.**

(1) G.M.T.: The Greenwich Mean Time of (in-situ) thermometer inversion and sea water sample collection.

When a multiple cast was initiated prior to and continued after midnight, the times indicated are uninterrupted by the change of day and appear beyond 24.0 hours. This will be accompanied by a statement: "MULTIPLE CAST CONTINUED NEXT DAY", which is printed following the last level of observed values.

(2) DEPTH: The depth in metres at the reversal time of deepest cast.

(3) TEMPERATURE: Temperatures from deepsea reversing thermometers, read to 0.01° C. Surface temperature measurement procedures are described in the chapter "OBSERVATION PROCEDURES" of section I, and/or the "GENERAL INFORMATION" chapter of section III.
An alphabetical character following the temperature value represents the measurement error estimate referred to in the INTRODUCTION to this section.

(4) SALINITY: Salinity as defined by: $S = 0.03 + 1.805\ Cl‰$, reported in:
a. 1/100 parts per 1000, or
b. 1/1000 parts per 1000.

In case a: an alphabetical character following the value is the measurement error estimate as referred to under (3).
In case b: no error estimate indication is provided for, but an additional decimal digit takes its place.

(5) OXYGEN: The concentration of dissolved oxygen expressed in millilitres per litre to 2 decimal places.
An alphabetical character following the value is the measurement error estimate as referred to under (3).

(6) SIGMA-T: The specific gravity anomaly as defined by: (Specific gravity – 1) X $10^3$ (e.g., $\sigma_t$ reported as 2456, reads 24.56, and corresponds to a specific gravity of 1.02456).

(7) SOUND: The sound velocity is reported in m/sec. to 1 decimal place (e.g., 1437.9 m/sec.). The computation is carried out using Wilson's formula (1960), expressed in terms of temperature, salinity and total pressure.

(8) $PO_4$ — Phosphate-Phosphorus reported to hundredths of microgram-atoms per litre.

(9) -P- — Total Phosphorus reported to hundredths of microgram-atoms per litre.

(10) $NO_2$ — Nitrite-Nitrogen reported to hundredths of microgram-atoms per litre – No dissolved nitrogen included –

(11) $NO_3$ — Nitrate-Nitrogen reported to tenths of microgram-atoms per litre.

(12) $SiO_3$ — Silicate-Silicon reported in whole microgram-atoms per litre.

(13) pH — The pH value.

NOTE: "TRC" (trace) is reported when a chemical entry has a value less than the standard deviation of measurement for that particular variable.

## INTERPOLATED DATA HEADINGS

*(1) DEPTH (2) TEMP (3) SAL (4) OXYGEN (5) SGMT (6) SOUND*
*(7) DELTA-D (8) POT-EN (9) SVA.*

(1) DEPTH: Standard Oceanographic Depth in whole metres, as well as additional depths: 125, 175, 225, 3500, 4500, 5500, 6500, 7500, 8500, 9500.

(2) TEMPERATURE: Interpolated value at standard depth, followed by the **combined measurement and interpolation error estimate** (see "INTRODUCTION" to section II of the data record).

(3) SALINITY:

A. The reported salinity values are measured to three decimal places.
   (i) the interpolation error estimate is less than twice the standard deviation of measurement
      –the interpolated value is reported to three decimal places (e.g., 30.139).
   (ii) the interpolation error estimate is equal to or greater than twice the standard deviation of measurement.
      –the interpolated value is reported to two decimal places, and followed by the **interpolation error estimate** (e.g., 29.23 C).

B. The reported salinity values are measured to two decimal places and followed by the measurement error estimate.
      –the interpolated value is reported to two decimal places, and followed by the **combined measurement and interpolation error estimate** (e.g., 30.59 B).

(4) OXYGEN: Interpolated value at standard depth, followed by the **combined measurement and interpolation error estimate** (see "Introduction" to section II of the data record).

(5) SIGMA-T: Computed from temperature and salinity values at standard oceanographic depth.

(6) SOUND VELOCITY: Computed from temperature, salinity and total pressure values at standard oceanographic depth, using Wilson's formula (1960).

(7) DELTA-D: The geo-potential anomaly as defined by:

$$\Delta D = \int_o^P \delta dp$$

$\Delta D$ is expressed in dynamic metres ($10^5$ ergs/gram) and recorded to three decimal places (e.g., 2.345 dyn. metres).

(8) POTENTIAL ENERGY ANOMALY: The Potential energy anomaly $\chi$ as defined by:

$$\chi = {}^1/g \int_o^P p\delta dp = \int_o^z \rho p \delta dz$$

$\chi$ is expressed in units of $10^6$ ergs/cm$^2$ and recorded to two decimal places (e.g., 116.44).

(9) SPECIFIC VOLUME ANOMALY: The specific volume anomaly as defined by:

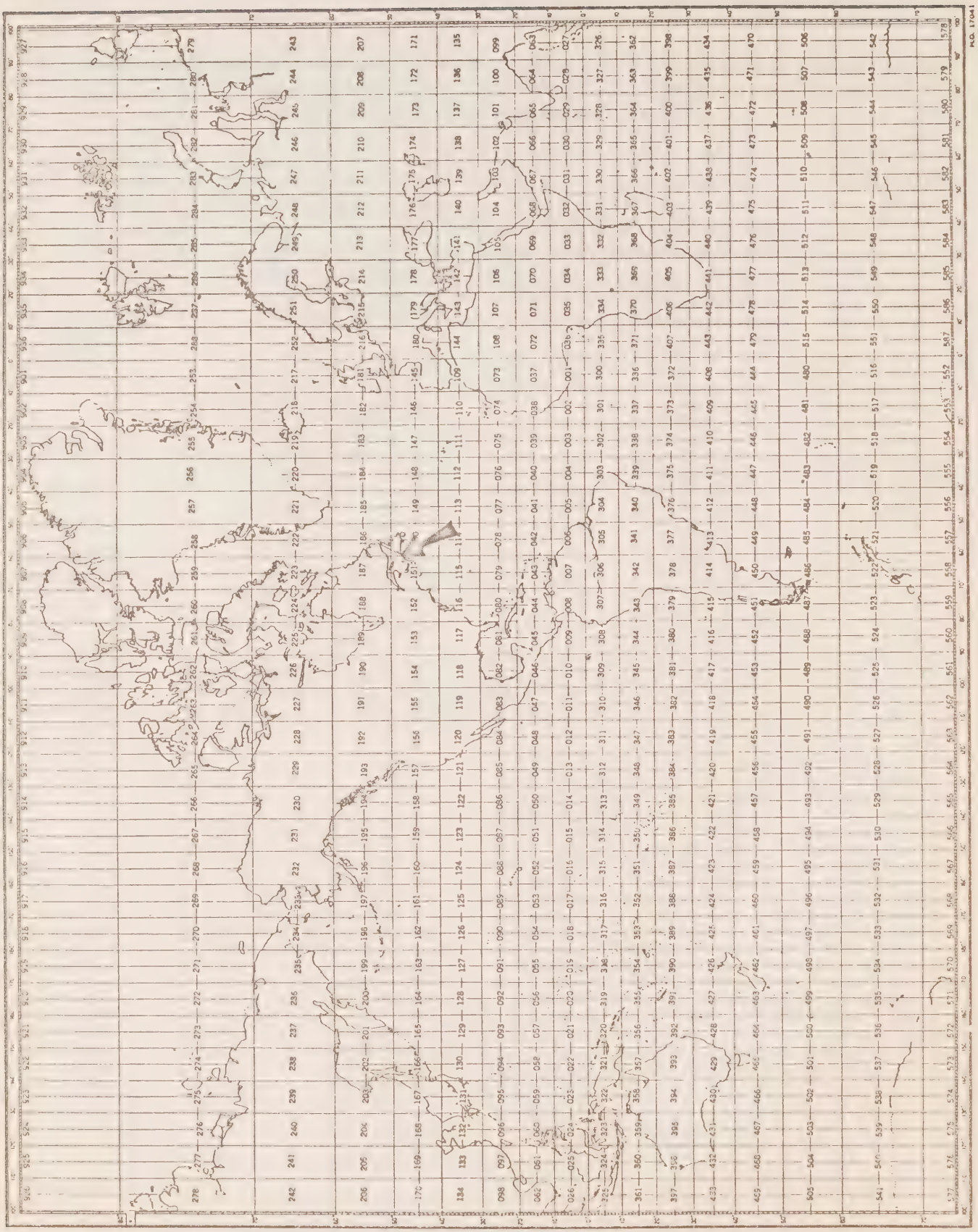
$$\delta = \alpha - \alpha_{35.0.P}$$

$\delta$ is expressed in ml/gr, and conventionally reported as $10^5\,\delta$, to one decimal place (i.e., $\delta$ reported as 1234, reads 123.4, and corresponds to a specific volume anomaly of 0.001234 ml/gr.).

## SPECIAL CHARACTERS

‡ (Record mark): is used to indicate inconsistencies which are printed in an area below the "Observed Data". A corresponding record mark at the extreme left hand side indicates the level at which the inconsistency occurs

* (Asterisk): this character may occur in the **interpolated** portion of the data record. It is printed at the extreme left hand side of the page, when three or more standard depth levels fall within any one **observed depth interval.** The **third,** and all consequent levels are preceded by the asterisk to indicate that more than **two** machine interpolations were carried out, utilizing the same set of interpolation parabolas. The asterisk will also appear when the last standard depth is an extrapolation and there are at least two interpolations between the last two observed depths.



MARSDEN SQUARE CHART

**Table 1**

**CONVERSION MINUTES TO 1/10 HRS.**

| Minutes | Tenths Hrs. |
|---|---|
| 00–03 | 0 |
| 04–08 | 1 |
| 09–15 | 2 |
| 16–20 | 3 |
| 21–27 | 4 |
| 28–32 | 5 |
| 33–39 | 6 |
| 40–44 | 7 |
| 45–51 | 8 |
| 52–56 | 9 |
| 57–59 | 0 (next HR.) |

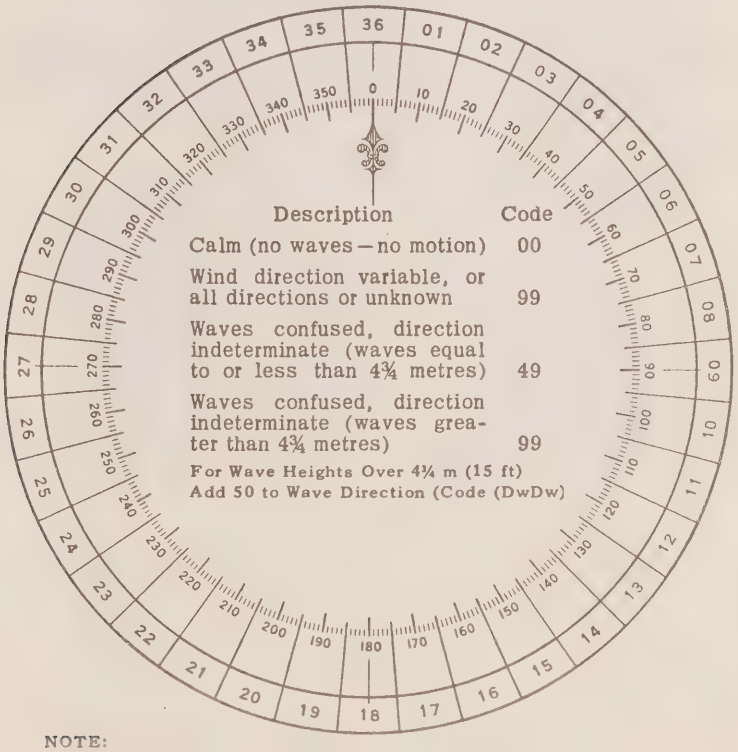
**Table 2**

**WATER COLOR CODE**

**Based on Percentage Yellow**

| Code: | Description |
|---|---|
| 00 | Deep Blue |
| 10 | Blue |
| 20 | Greenish Blue |
| 30 | Bluish Green |
| 40 | Green |
| 50 | Light Green |
| 60 | Yellowish Green |
| 70 | Yellow Green |
| 80 | Green Yellow |
| 90 | Greenish Yellow |
| 99 | Yellow |

**Table 3. DIRECTION CODE (dd)**




NOTE:
Always use the true direction from which the wind is blowing, or the direction from which Waves I (sea), or Waves II (swell) come.

## Table 4. PERIOD OF THE WAVES (Pw)

(Measure to the Nearest Second)

| Code: | Period in Seconds: | Code: | Period in Seconds: |
|---|---|---|---|
| 2 | 5 sec. or less | 8 | 16 or 17 sec. |
| 3 | 6 or 7 sec. | 9 | 18 or 19 sec. |
| 4 | 8 or 9 sec. | 0 | 20 or 21 sec. |
| 5 | 10 or 11 sec. | 1 | Over 21 sec. |
| 6 | 12 or 13 sec. | X | Calm, or period |
| 7 | 14 or 15 sec. | | not determined |

## Table 5. HEIGHT OF THE WAVES (Hw)

- The average value of the wave height (vertical distance between trough and crest) is reported, as obtained from the larger well formed waves of the wave system being observed.
- Each code figure provides for reporting a range of heights. For example: 1 = ¼ m (1 ft) to ¾ m (2½ ft); 5 = 2¼ m (7 ft) to 2¾ m (9 ft); 9 = 4¼ m (13½ ft) to 4¾ m (15 ft), etc.
- If a wave height comes exactly midway between the heights corresponding to two code figures, the lower code figure is reported; e.g. a height of 2¾ m is reported by code figure 5.

| Code | | | Code | |
|---|---|---|---|---|
| 0 | Less than ¼ m (1 ft) | | | |
| 1 | ½ m ( 1½ ft) | | 0 | 5 m (16 ft) |
| 2 | 1 m ( 3 ft) | | 1 | 5½ m (17½ ft) |
| 3 | 1½ m ( 5 ft) | Add | 2 | 6 m (19 ft) |
| 4 | 2 m ( 6½ ft) | 50 | 3 | 6½ m (21 ft) |
| 5 | 2½ m ( 8 ft) | to | 4 | 7 m (22½ ft) |
| 6 | 3 m ( 9½ ft) | Dw Dw | 5 | 7½ m (24 ft) |
| 7 | 3½ m (11 ft) | | 6 | 8 m (25½ ft) |
| 8 | 4 m (13 ft) | | 7 | 8½ m (27 ft) |
| 9 | 4½ m (14 ft) | | 8 | 9 m (29 ft) |
| x | Height not determined | | 9 | 9½ m (30½ ft) or more |

## Table 6. WIND FORCE CODE

The Beaufort force of the wind is estimated from the appearance of the sea surface, according to the table below. This table is only intended as a guide to show roughly what may be expected on the open sea, remote from land. Factors which must be taken into account are the "lag" effect between the wind increasing and the sea getting up; and the influence of "fetch", depth, swell, heavy rain and tide effect on the appearance of the sea. Estimation of the wind force by this method becomes unreliable in shallow water or when close inshore, owing to the tidal effect and the shelter provided by the land.

| Code | Appearance of sea if fetch and duration of the blow have been sufficient to develop the sea fully | Description |
|---|---|---|
| 00 | Sea like a mirror | Calm |
| 01 | Ripples with the appearance of scales are formed, but without foam crests. | Light Air |
| 02 | Small wavelets; crests have a glassy appearance and do not break. | Light Breeze |
| 03 | Large wavelets; crests begin to break; foam of glassy appearance; perhaps scattered white horses. | Gentle Breeze |
| 04 | Small waves, becoming longer; fairly frequent white horses. | Moderate breeze |
| 05 | Moderate waves; many white horses are formed (chance of some spray) | Fresh Breeze |
| 06 | Large waves; white foam crests everywhere (probably some spray) | Strong Breeze |
| 07 | Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind. | Near Gale |
| 08 | Moderately high waves; edges of crests begin to break into the spindrift; foam is blown in well-marked streaks along the direction of the wind. | Gale |
| 09 | High waves; dense streaks of foam along wind; crests begin to topple, tumble and roll over; spray may affect visibility. | Strong Gale |
| 10 | Very high waves with long overhanging crests; foam in great patches blown in dense white streaks along wind; sea surface takes a white appearance; tumbling becomes heavy and shock-like; visibility affected. | Storm |
| 11 | Exceptionally high waves (medium sized ships may be lost to view behind waves); sea covered with long white patches of foam lying along the wind; everywhere edges of crests are blown into froth; visibility affected. | Violent Storm |
| 12 | Air is filled with foam and spray; sea completely white with driving spray; visibility seriously affected. | Hurricane |

# Table 7. PRESENT WEATHER

W.W. CODE

## NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

Code figure ww

No meteors except photometeors

| ww | | |
|---|---|---|
| 00 | Cloud development not observed or not observable | characteristic change of the state of sky during the past hour |
| 01 | Clouds generally dissolving or becoming less developed | |
| 02 | State of sky on the whole unchanged | |
| 03 | Clouds generally forming or developing | |

Haze, dust, sand or smoke

| ww | | |
|---|---|---|
| 04 | Visibility reduced by smoke, e.g. veldt or forest fires, industrial smoke or volcanic ashes | |
| 05 | Haze | |
| 06 | Widespread dust in suspension in the air, not raised by wind at or near the station at the time of observation | |
| 07 | Dust or sand raised by wind at or near the station at the time of observation, but no well developed dust whirl(s) or sand whirl(s), and no duststorm or sandstorm seen | |
| 08 | Well developed dust whirl(s) or sand whirl(s) seen at or near the station during the preceding hour or at the time of observation, but no dustorm or sandstorm | |
| 09 | Duststorm or sandstorm within sight at the time of observation, or at the station during the preceding hour | |
| 10 | Mist | |
| 11 | Patches of shallow fog or ice fog at the station, whether on land or sea, not deeper than about 2 metres on land or 10 metres at sea | |
| 12 | More or less continuous shallow fog or ice fog at the station, whether on land or sea, not deeper than about 2 metres on land or 10 metres at sea | |
| 13 | Lightning visible, no thunder heard | |
| 14 | Precipitation within sight, not reaching the ground or the surface of the sea | |
| 15 | Precipitation within sight, reaching the ground or the surface of the sea, but distant (i.e. estimated to be more than 5 km) from the station | |
| 16 | Precipitation within sight, reaching the ground or the surface of the sea, near to, but not at the station | |
| 17 | Thunderstorm, but no precepitation at the time of observation | |
| 18 | Squalls | at or within sight of the station during the preceding hour or at the time of observation |
| 19 | Funnel clouds | at or within sight of the station during the preceding hour or at the time of observation |

| ww | | |
|---|---|---|
| ww = 20 – 29 | Precipitation, fog, ice fog or thunderstorm at the station during the preceding hour but not at the time of observation | |
| 20 | Drizzle (not freezing) or snow grains | not falling as shower(s) |
| 21 | Rain (not freezing) | |
| 22 | Snow | |
| 23 | Rain and snow or ice pellets, type (a) | |
| 24 | Freezing drizzle or freezing rain | |
| 25 | Shower(s) of rain | |
| 26 | Shower(s) of snow, or of rain and snow | |
| 27 | Shower(s) of hail, or of rain and hail | |
| 28 | Fog or ice fog | |
| 29 | Thunderstorm (with or without precipitation) | |
| ww = 30 – 39 | Duststorm, sandstorm, drifting or blowing snow | |
| 30 | Slight or moderate duststorm or sandstorm | – has decreased during the preceding hour |
| 31 | Slight or moderate duststorm or sandstorm | – no appreciable change during the preceding hour |
| 32 | Slight or moderate duststorm or sandstorm | – has begun or has increased during the preceding hour |
| 33 | Severe duststorm or sandstorm | – has decreased during the preceding hour |
| 34 | Severe duststorm or sandstorm | – no appreciable change during the preceding hour |
| 35 | Severe duststorm or sandstorm | – has begun or has increased during the preceding hour |
| 36 | Slight or moderate blowing snow | generally low (below eye level) |
| 37 | Heavy drifting snow | generally low (below eye level) |
| 38 | Slight or moderate blowing snow | generally high (above eye level) |
| 39 | Heavy blowing snow | generally high (above eye level) |
| ww = 40 – 49 | Fog or ice fog at the time of observation | |
| 40 | Fog or ice fog at a distance at the time of observation, but not at the station during the preceding hour, the fog or ice fog extending to a level above that of the observer | |
| 41 | Fog or ice fog in patches | |
| 42 | Fog or ice fog, sky visible | has become thinner during the preceding hour |
| 43 | Fog or ice fog, sky invisible | has become thinner during the preceding hour |
| 44 | Fog or ice fog, sky visible | no appreciable change during the preceding hour |
| 45 | Fog or ice fog, sky invisible | no appreciable change during the preceding hour |
| 46 | Fog or ice fog, sky visible | has begun or has become thicker during the preceding hour |
| 47 | Fog or ice fog, sky invisible | has begun or has become thicker during the preceding hour |
| 48 | Fog, depositing rime, sky visible | |
| 49 | Fog, depositing rime, sky invisible | |

NO PRECIPITATION ON STATION AT TIME OF OBSERVATION

## PRECIPITATION ON STATION AT TIME OF OBSERVATION

| ww = 50 – 59 | Drizzle | |
|---|---|---|
| 50 | Drizzle, not freezing, intermittent | slight at time of observation |
| 51 | Drizzle, not freezing, continuous | slight at time of observation |
| 52 | Drizzle, not freezing, intermittent | moderate at time of observation |
| 53 | Drizzle, not freezing, continuous | moderate at time of observation |
| 54 | Drizzle, not freezing, intermittent | heavy (dense) at time of observation |
| 55 | Drizzle, not freezing, continuous | heavy (dense) at time of observation |
| 56 | Drizzle, freezing, slight | |
| 57 | Drizzle, freezing, moderate or heavy (dense) | |
| 58 | Drizzle and rain, slight | |
| 59 | Drizzle and rain, moderate or heavy | |

| ww = 60 – 69 | Rain | |
|---|---|---|
| 60 | Rain, not freezing, intermittent | slight at time of observation |
| 61 | Rain, not freezing, continuous | slight at time of observation |
| 62 | Rain, not freezing, intermittent | moderate at time of observation |
| 63 | Rain, not freezing, continuous | moderate at time of observation |
| 64 | Rain, not freezing, intermittent | heavy at time of observation |
| 65 | Rain, not freezing, continuous | heavy at time of observation |
| 66 | Rain, freezing, slight | |
| 67 | Rain, freezing, moderate or heavy | |
| 68 | Rain or drizzle and snow, slight | |
| 69 | Rain or drizzle and snow, moderate or heavy | |

| 70 – 79 | Solid precipitation not in showers | |
|---|---|---|
| ww | | |
| 70 | Intermittent fall of snow flakes | slight at time of observation |
| 71 | Continuous fall of snow flakes | slight at time of observation |
| 72 | Intermittent fall of snow flakes | moderate at time of observation |
| 73 | Continuous fall of snow flakes | moderate at time of observation |
| 74 | Intermittent fall of snow flakes | heavy at time of observation |
| 75 | Continuous fall of snow flakes | heavy at time of observation |
| 76 | Ice prisms (with or without fog) | |
| 77 | Snow grains (with or without fog) | |
| 78 | Isolated starlike snow crystals (with or without fog) | |
| 79 | Ice pellets, type (a) | |

| ww = 80 – 99 | Showery precipitation, or precipitation with current or recent thunderstorm | |
|---|---|---|
| 80 | Rain shower(s), slight | |
| 81 | Rain shower(s), moderate or heavy | |
| 82 | Rain shower(s), violent | |
| 83 | Shower(s) of rain and snow mixed, slight | |
| 84 | Shower(s) of rain and snow mixed, moderate or heavy | |
| 85 | Snow shower(s), slight | |
| 86 | Snow shower(s), moderate or heavy | |
| 87 | Shower(s) of snow pellets or ice pellets, type (b), with or without rain or rain and snow mixed | – slight |
| 88 | Shower(s) of snow pellets or ice pellets, type (b), with or without rain or rain and snow mixed | – moderate or heavy |
| 89 | Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder | – slight |
| 90 | Shower(s) of hail, with or without rain or rain and snow mixed, not associated with thunder | – moderate or heavy |
| 91 | Slight rain at time of observation | thunderstorm during the preceding hour but not at time of observation |
| 92 | Moderate or heavy rain at time of observation | thunderstorm during the preceding hour but not at time of observation |
| 93 | Slight snow, or rain and snow mixed or hail at time of observation | thunderstorm during the preceding hour but not at time of observation |
| 94 | Moderate or heavy snow, or rain and snow mixed or hail at time of observation | thunderstorm during the preceding hour but not at time of observation |
| 95 | Thunderstorm, slight or moderate, without hail, but with rain and/or snow at time of observation | thunderstorm at time of observation |
| 96 | Thunderstorm, slight or moderate, with hail at time of observation | thunderstorm at time of observation |
| 97 | Thunderstorm, heavy, without hail, but with rain and/or snow at time of observation | thunderstorm at time of observation |
| 98 | Thunderstorm, combined with duststorm or sandstorm at time of observation | thunderstorm at time of observation |
| 99 | Thunderstorm, heavy, with hail at time of observation | thunderstorm at time of observation |

PRECIPITATION ON STATION AT TIME OF OBSERVATION

## Table 8. CLOUD TYPE CODE

| Code | Cloud Type | Code | Cloud Type |
|---|---|---|---|
| 0 | Cirrus ..... Ci | 5 | Nimbostratus ..... Ns |
| 1 | Cirrocumulus ..... Cc | 6 | Stratocumulus ..... Sc |
| 2 | Cirrostratus ..... Cs | 7 | Stratus ..... St |
| 3 | Altocumulus..... Ac | 8 | Cumulus ..... Cu |
| 4 | Altostratus..... As | 9 | Cumulonimbus ..... Cb |
| X | Cloud not visible owing to darkness, fog, duststorm, sandstorm, or other analogous phenomena | | |

## Table 9. CLOUD AMOUNT CODE

| Code | Cloud Cover | Code | Cloud Cover |
|---|---|---|---|
| 0 | 0 | 6 | 6 oktas |
| 1 | 1 okta or less, but not zero | 7 | 7 oktas or more, but not 8 oktas |
| 2 | 2 oktas | 8 | 8 oktas |
| 3 | 3 oktas | 9 | Sky obscured, or cloud amount cannot be estimated |
| 4 | 4 oktas | | |
| 5 | 5 oktas | | |

Note: 1 okta = $\frac{1}{8}$ of the sky covered

## Table 10. VISIBILITY

| Code | Estimate of hor. Visibility | |
|---|---|---|
| 0 | Less than 50 metres | (less than 55 yards) |
| 1 | 50–200 metres | (approx. 55–220 yards) |
| 2 | 200–500 metres | (approx. 220–550 yards) |
| 3 | 500–1,000 metres | (approx. 550 yards– $\frac{5}{8}$ n.m.) |
| 4 | 1–2 km | (approx. $\frac{5}{8}$–1 n.m.) |
| 5 | 2–4 km | (approx. 1–2 n.m.) |
| 6 | 4–10 km | (approx. 2–6 n.m.) |
| 7 | 10–20 km | (approx. 6–12 n.m.) |
| 8 | 20–50 km | (approx. 12–30 n.m.) |
| 9 | 50 km or more | (30 n.m. or more) |

Note: n.m. = nautical mile

## TABLE 11. INSTITUTE CODE

| Code | Institute |
|---|---|
| 01 | Marine Ecology Laboratory, Bedford Institute |
| 02 | Pacific Oceanographic Group |
| 03 | Biological Station, St. Andrews, N.B. |
| 04 | Arctic Biological Station, Ste. Anne de Bellevue, P.Q. |
| 05 | Biological Station, St. John's Nfld. |
| 06 | Station de Biologie Marine, Grande Riviere, P.Q. |
| 07 | Marine Sciences Branch, Central Region |
| 08 | Defence Research Establishment, Atlantic |
| 09 | Defence Research Establishment, Pacific |
| 10 | Atlantic Oceanographic Laboratory, Bedford Institute |
| 11 | Polar Continental Shelf Project |
| 12 | Great Lakes Institute |
| 13 | Institute of Oceanography, University of British Columbia |
| 14 | Institute of Oceanography, Dalhousie University |
| 15 | Marine Sciences Branch, Pacific Region |
| 16 | Department of Transport |
| 17 | Marine Sciences Centre, McGill University |
| 18 | Canadian Forces Maritime Command, East Coast |
| 19 | Canadian Forces Maritime Command, West Coast |
| 20 | Ontario Water Resources Commission |
| 21 | Dept. of National Health and Welfare |
| 22 | Inland Waters Branch, Dept. of Energy, Mines and Resources. |

# SECTION III

Serial oceanographic data

## GENERAL INFORMATION

| | |
|---|---|
| Institute: | Atlantic Oceanographic Laboratory, Bedford Institute. |
| Observation platform: | MV "Theta" |
| Vessel's cruising speed: | 10 knots |
| Total number of stations occupied: | 80 |
| Anemometer height above sea level: | 11 metres |
| Barometer readings: | Aneroid Barometer (corrected) |
| Air temperature: | Fixed Thermometer |
| Surface sea water temperature: | Bucket sample (deck thermometer) |

The following Standard Deviations were used to express both measurement and interpolation error estimates.

| | |
|---|---|
| Temperature | 0.03 |
| Salinity | 0.005 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 155 | WAVES 1 3452 | AIR T | | VIS | 7 |
| CONS. NO 001 | MONTH 6 | MXSAMPD 01 | WAVES 2 3291 | WET B | | STN | |
| LAT 47-044N | DAY 13 | NO.DPTH 1 | WND-DIR 310 | WW-CODE | 02 | | |
| LON 60-174W | HR 18.6 | W-COLOR | WND-SPD 07 | CLD-TPE | 0 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1021.0 | CLD-AMT | 1 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 186 | 0140 | 0211 | 33444 | | 2674 | 14589 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 51 | WAVES 1 2752 | AIR T | | VIS | 8 |
| CONS. NO 002 | MONTH 6 | MXSAMPD 00 | WAVES 2 3191 | WET B | | STN | |
| LAT 47-257N | DAY 14 | NO.DPTH 1 | WND-DIR 270 | WW-CODE | 02 | | |
| LON 62-539W | HR 13.3 | W-COLOR | WND-SPD 07 | CLD-TPE | 0 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1021.5 | CLD-AMT | 2 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 133 | 0044 | 0085 | 31189 | | 2502 | 14486 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 360 | WAVES 1 0352 | AIR T | | VIS | 8 |
| CONS. NO 003 | MONTH 6 | MXSAMPD 03 | WAVES 2 2991 | WET B | | STN | |
| LAT 48-226N | DAY 14 | NO.DPTH 1 | WND-DIR 220 | WW-CODE | 02 | | |
| LON 61-583W | HR 22.9 | W-COLOR | WND-SPD 03 | CLD-TPE | 0 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1016.2 | CLD-AMT | 2 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 229 | 0331 | 0421 | 34709 | | 2755 | 14728 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 190 | WAVES 1 00X0 | AIR T | | VIS | 6 |
| CONS. NO 004 | MONTH 6 | MXSAMPD 02 | WAVES 2 00X0 | WET B | | STN | |
| LAT 48-587N | DAY 15 | NO.DPTH 1 | WND-DIR CALM | WW-CODE | 25 | | |
| LON 64-138W | HR 13.9 | W-COLOR | WND-SPD 00 | CLD-TPE | 8 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1016.1 | CLD-AMT | 8 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 139 | 0186 | 0268 | 33816 | | 2699 | 14627 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 187 | WAVES 1 00X0 | AIR T | | VIS | 7 |
| CONS. NO 005 | MONTH 6 | MXSAMPD 02 | WAVES 2 00X0 | WET B | | STN | |
| LAT 49-209N | DAY 15 | NO.DPTH 1 | WND-DIR CALM | WW-CODE | 01 | | |
| LON 63-405W | HR 19.6 | W-COLOR | WND-SPD 00 | CLD-TPE | 6 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1003.0 | CLD-AMT | 8 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 196 | 0185 | 0333 | 34108 | | 2717 | 14659 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 119 | WAVES 1 00X0 | AIR T | | VIS | 1 |
| CONS. NO 006 | MONTH 6 | MXSAMPD 01 | WAVES 2 00X0 | WET B | | STN | |
| LAT 50-043N | DAY 16 | NO.DPTH 1 | WND-DIR CALM | WW-CODE | 47 | | |
| LON 64-088W | HR 12.3 | W-COLOR | WND-SPD 00 | CLD-TPE | X | | |
| MARSD SQ 187 | C/I 1810 | W-TRNSP | BARO 1003.1 | CLD-AMT | 9 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 124 | 0110 | 0016 | 32765 | | 2632 | 14487 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 150 | WAVES 1 XX | AIR T | | VIS 9 | |
| CONS. NO 007 | MONTH 6 | MXSAMPD 01 | WAVES 2 XX | WET B | | STN | |
| LAT 49-000N | DAY 17 | NO.DPTH 9 | WND-DIR 360 | WW-CODE 02 | | | |
| LON 67-117W | HR 14.5 | W-COLOR | WND-SPD 02 | CLD-TPE 1 | | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1010.3 | CLD-AMT 2 | | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 145 | 0000 | 1190 | 23063 | | 1740 | 14823 |
| 145 | 0010 | 0532 | 25374 | | 2006 | 14598 |
| 145 | 0021 | 0222 | 28701 | | 2295 | 14510 |
| 145 | 0030 | 0119 | 30112 | | 2414 | 14484 |
| 145 | 0040 | 0063 | 31321 | | 2513 | 14477 |
| 145 | 0050 | -0028 | 31789 | | 2555 | 14444 |
| 145 | 0076 | -0056 | 32216 | | 2591 | 14441 |
| 145 | 0100 | -0017 | 32586 | | 2619 | 14468 |
| 145 | 0140 | 0212 | 33585 | | 2685 | 14592 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1190 | 23063 | | 1740 | 14823 | 0000 | 00000 | 10254 |
| 0010 | 0532 | 25374 | | 2006 | 14598 | 0090 | 00004 | 7688 |
| 0020 | 0237 | 2842 G | | 2271 | 14513 | 0154 | 00013 | 5148 |
| 0030 | 0119 | 30112 | | 2414 | 14484 | 0199 | 00024 | 3788 |
| 0050 | -0028 | 31789 | | 2555 | 14444 | 0261 | 00048 | 2439 |
| 0075 | -0058 | 3221 B | | 2590 | 14439 | 0319 | 00084 | 2103 |
| 0100 | -0017 | 32586 | | 2619 | 14468 | 0368 | 00128 | 1832 |
| 0125 | 0105 | 3320 C | | 2662 | 14536 | 0409 | 00175 | 1430 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 38 | WAVES 1 | XX | AIR T | | VIS | 8 |
| CONS. NO 008 | MONTH 6 | MXSAMPD | 00 | WAVES 2 | XX | WET B | | STN | |
| LAT 49-227N | DAY 18 | NO.DPTH | 4 | WND-DIR | 130 | WW-CODE | 00 | | |
| LON 63-374W | HR 05.0 | W-COLOR | | WND-SPD | 10 | CLD-TPE | X | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1010.0 | CLD-AMT | 9 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 050 | 0000 | 0730 | 30973 | | 2424 | 14750 |
| 050 | 0010 | 0516 | 31184 | | 2466 | 14668 |
| 050 | 0021 | 0358 | 31412 | | 2500 | 14606 |
| 050 | 0030 | 0284 | 31521 | | 2515 | 14577 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 0730 | 30973 | | 2424 | 14750 | 0000 | 00000 | 3695 |
| 0010 | 0516 | 31184 | | 2466 | 14668 | 0035 | 00002 | 3290 |
| 0020 | 0369 | 31394 | | 2497 | 14610 | 0067 | 00006 | 2992 |
| 0030 | 0284 | 31521 | | 2515 | 14577 | 0096 | 00014 | 2826 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 174 | WAVES 1 | XX | AIR T | | VIS | 8 |
| CONS. NO 009 | MONTH 6 | MXSAMPD | 01 | WAVES 2 | XX | WET B | | STN | |
| LAT 49-210N | DAY 18 | NO.DPTH | 9 | WND-DIR | 130 | WW-CODE | 00 | | |
| LON 63-396W | HR 05.7 | W-COLOR | | WND-SPD | 07 | CLD-TPE | X | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1010.0 | CLD-AMT | 9 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 057 | 0000 | 0820 | 29923 | | 2329 | 14771 |
| 057 | 0010 | 0687 | 30769 | | 2413 | 14732 |
| 057 | 0020 | 0297 | 31440 | | 2507 | 14580 |
| 057 | 0030 | 0128 | 31683 | | 2539 | 14510 |
| 057 | 0040 | -0015 | 31935 | | 2566 | 14450 |
| 057 | 0050 | -0068 | 32043 | | 2577 | 14429 |
| 057 | 0075 | -0080 | 32265 | | 2595 | 14430 |
| 057 | 0099 | -0047 | 32586 | | 2620 | 14454 |
| 057 | 0149 | 0119 | 33236 | | 2664 | 14547 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 0820 | 29923 | | 2329 | 14771 | 0000 | 00000 | 4596 |
| 0010 | 0687 | 30769 | | 2413 | 14732 | 0042 | 00002 | 3795 |
| 0020 | 0297 | 31440 | | 2507 | 14580 | 0076 | 00007 | 2897 |
| 0030 | 0128 | 31683 | | 2539 | 14510 | 0103 | 00014 | 2596 |
| 0050 | -0068 | 32043 | | 2577 | 14429 | 0152 | 00033 | 2230 |
| 0075 | -0080 | 32265 | | 2595 | 14430 | 0206 | 00068 | 2054 |
| 0100 | -0049 | 3257 D | | 2619 | 14453 | 0255 | 00111 | 1831 |
| 0125 | 0019 | 3289 C | | 2642 | 14493 | 0298 | 00161 | 1615 |
| *0150 | 0124 | 33251 | | 2665 | 14550 | 0336 | 00214 | 1402 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 291 | WAVES 1 | XX | AIR T | | VIS | 8 |
| CONS. NO 010 | MONTH 6 | MXSAMPD | 02 | WAVES 2 | XX | WET B | | STN | |
| LAT 49-180N | DAY 18 | NO.DPTH | 12 | WND-DIR | 120 | WW-CODE | 00 | | |
| LON 63-436W | HR 06.6 | W-COLOR | | WND-SPD | 05 | CLD-TPE | X | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1010.5 | CLD-AMT | 9 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 066 | 0000 | 0920 | 30452 | | 2356 | 14816 |
| 066 | 0010 | 0604 | 30722 | | 2420 | 14698 |
| 066 | 0021 | 0168 | 31453 | | 2518 | 14523 |
| 066 | 0030 | 0073 | 31754 | | 2548 | 14486 |
| 066 | 0040 | -0026 | 31994 | | 2572 | 14446 |
| 066 | 0050 | -0059 | 32110 | | 2582 | 14434 |
| 066 | 0076 | -0088 | 32320 | | 2600 | 14427 |
| 066 | 0100 | -0012 | 32967 | | 2649 | 14476 |
| 066 | 0150 | 0147 | 33336 | | 2670 | 14561 |
| 066 | 0201 | 0323 | 34053 | | 2713 | 14656 |
| 066 | 0225 | 0362 | 34227 | | 2723 | 14679 |
| 066 | 0250 | 0410 | 34475 | | 2738 | 14707 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 0920 | 30452 | | 2356 | 14816 | 0000 | 00000 | 4342 |
| 0010 | 0604 | 30722 | | 2420 | 14698 | 0041 | 00002 | 3732 |
| 0020 | 0202 B | 3139 C | | 2510 | 14537 | 0074 | 00007 | 2869 |
| 0030 | 0073 | 31754 | | 2548 | 14486 | 0101 | 00014 | 2512 |
| 0050 | -0059 | 32110 | | 2582 | 14434 | 0148 | 00033 | 2182 |
| 0075 | -0089 | 32308 | | 2599 | 14427 | 0201 | 00066 | 2018 |
| 0100 | -0012 | 32967 | | 2649 | 14476 | 0246 | 00106 | 1543 |
| 0125 | 0067 | 3321 I | | 2665 | 14519 | 0283 | 00148 | 1395 |
| 0150 | 0147 | 33336 | | 2670 | 14561 | 0317 | 00197 | 1353 |
| 0175 | 0240 B | 3370 G | | 2692 | 14611 | 0349 | 00249 | 1152 |
| 0200 | 0320 | 34040 | | 2712 | 14655 | 0376 | 00300 | 0964 |
| 0225 | 0362 | 34227 | | 2723 | 14679 | 0399 | 00351 | 0865 |
| 0250 | 0410 | 34475 | | 2738 | 14707 | 0419 | 00399 | 0730 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 379 | WAVES 1 1251 | AIR T | | VIS | 8 |
| CONS. NO 011 | MONTH 6 | MXSAMPD 03 | WAVES 2 XX | WET B | | STN | |
| LAT 49-134N | DAY 18 | NO.DPTH 14 | WND-DIR 120 | WW-CODE | 02 | | |
| LON 63-526W | HR 08.0 | W-COLOR | WND-SPD 05 | CLD-TPE | 3 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1010.3 | CLD-AMT | 7 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 080 | 0000 | 0800 | 30384 | | 2368 | 14769 |
| 080 | 0010 | 0795 | 30349 | | 2366 | 14769 |
| 080 | 0021 | 0335 | 31149 | | 2481 | 14592 |
| 080 | 0030 | 0096 | 31612 | | 2535 | 14495 |
| 080 | 0040 | 0039 | 31844 | | 2557 | 14474 |
| 080 | 0050 | -0110 | 32024 | | 2577 | 14409 |
| 080 | 0076 | -0098 | 32307 | | 2599 | 14423 |
| 080 | 0100 | 0013 | 32812 | | 2636 | 14485 |
| 080 | 0150 | 0182 | 33455 | | 2677 | 14578 |
| 080 | 0200 | 0320 | 34033 | | 2712 | 14654 |
| 080 | 0225 | 0371 | 34243 | | 2724 | 14683 |
| 080 | 0250 | 0395 | 34358 | | 2730 | 14699 |
| 080 | 0300 | 0418 | 34584 | | 2746 | 14720 |
| 080 | 0349 | 0421 | 34640 | | 2750 | 14730 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 0800 | 30384 | | 2368 | 14769 | 0000 | 00000 | 4226 |
| 0010 | 0795 | 30349 | | 2366 | 14769 | 0043 | 00002 | 4246 |
| 0020 | 0383 C | 3106 C | | 2470 | 14612 | 0080 | 00008 | 3253 |
| 0030 | 0096 | 31612 | | 2535 | 14495 | 0110 | 00015 | 2632 |
| 0050 | -0110 | 32024 | | 2577 | 14409 | 0159 | 00035 | 2231 |
| 0075 | -0105 | 32296 | | 2599 | 14419 | 0212 | 00069 | 2022 |
| 0100 | 0013 | 32812 | | 2636 | 14485 | 0259 | 00110 | 1673 |
| 0125 | 0105 | 3317 D | | 2660 | 14536 | 0298 | 00155 | 1449 |
| 0150 | 0182 | 33455 | | 2677 | 14578 | 0333 | 00203 | 1288 |
| 0175 | 0256 | 3376 B | | 2696 | 14619 | 0363 | 00254 | 1115 |
| 0200 | 0320 | 34033 | | 2712 | 14654 | 0389 | 00304 | 0969 |
| 0225 | 0371 | 34243 | | 2724 | 14683 | 0412 | 00354 | 0862 |
| 0250 | 0395 | 34358 | | 2730 | 14699 | 0433 | 00405 | 0802 |
| 0300 | 0418 | 34584 | | 2746 | 14720 | 0470 | 00509 | 0662 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 360 | WAVES 1 4951 | AIR T | | VIS | 8 |
| CONS. NO 012 | MONTH 6 | MXSAMPD 03 | WAVES 2 XX | WET B | | STN | |
| LAT 49-085N | DAY 18 | NO.DPTH 14 | WND-DIR 350 | WW-CODE | 02 | | |
| LON 64-005W | HR 09.2 | W-COLOR | WND-SPD 05 | CLD-TPE | 3 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1010.8 | CLD-AMT | 7 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 092 | 0000 | 0840 | 30495 | | 2371 | 14786 |
| 092 | 0010 | 0819 | 30502 | | 2374 | 14780 |
| 092 | 0021 | 0161 | 31330 | | 2509 | 14519 |
| 092 | 0030 | -0050 | 31826 | | 2559 | 14431 |
| 092 | 0040 | -0111 | 32065 | | 2580 | 14407 |
| 092 | 0050 | -0118 | 32206 | | 2592 | 14407 |
| 092 | 0076 | -0008 | 32676 | | 2626 | 14469 |
| 092 | 0100 | 0076 | 33019 | | 2649 | 14517 |
| 092 | 0150 | 0234 | 33636 | | 2688 | 14604 |
| 092 | 0201 | 0343 | 34139 | | 2718 | 14666 |
| 092 | 0225 | 0381 | 34299 | | 2727 | 14688 |
| 092 | 0250 | 0404 | 34419 | | 2734 | 14704 |
| 092 | 0300 | 0422 | 34636 | | 2750 | 14722 |
| 092 | 0350 | 0421 | 34693 | | 2754 | 14731 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 0840 | 30495 | | 2371 | 14786 | 0000 | 00000 | 4197 |
| 0010 | 0819 | 30502 | | 2374 | 14780 | 0042 | 00002 | 4164 |
| 0020 | 0225 E | 3124 C | | 2497 | 14546 | 0078 | 00007 | 2994 |
| 0030 | -0050 | 31826 | | 2559 | 14431 | 0105 | 00014 | 2403 |
| 0050 | -0118 | 32206 | | 2592 | 14407 | 0150 | 00032 | 2089 |
| 0075 | -0014 | 32657 | | 2625 | 14466 | 0199 | 00063 | 1779 |
| 0100 | 0076 | 33019 | | 2649 | 14517 | 0241 | 00100 | 1549 |
| 0125 | 0160 | 33343 | | 2670 | 14563 | 0278 | 00142 | 1356 |
| 0150 | 0234 | 33636 | | 2688 | 14604 | 0310 | 00187 | 1191 |
| 0175 | 0293 | 33904 | | 2704 | 14637 | 0338 | 00234 | 1040 |
| 0200 | 0341 | 34131 | | 2718 | 14665 | 0362 | 00281 | 0915 |
| 0225 | 0381 | 34299 | | 2727 | 14688 | 0384 | 00329 | 0830 |
| 0250 | 0404 | 34419 | | 2734 | 14704 | 0404 | 00378 | 0766 |
| 0300 | 0422 | 34636 | | 2750 | 14722 | 0440 | 00476 | 0627 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 333 | WAVES 1 3151 | AIR T | | VIS | 8 |
| CONS. NO 013 | MONTH 6 | MXSAMPD 03 | WAVES 2 XX | WET B | | STN | |
| LAT 49-052N | DAY 18 | NO.DPTH 13 | WND-DIR 310 | WW-CODE | 01 | | |
| LON 64-054W | HR 10.8 | W-COLOR | WND-SPD 06 | CLD-TPE | 0 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1011.8 | CLD-AMT | 5 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 108 | 0000 | 0845 | 30486 | | 2369 | 14788 |
| 108 | 0010 | 0603 | 30554 | | 2407 | 14695 |
| 108 | 0021 | 0073 | 31509 | | 2528 | 14481 |
| 108 | 0030 | -0119 | 31920 | | 2569 | 14400 |
| 108 | 0040 | -0111 | 32204 | | 2591 | 14409 |
| 108 | 0050 | -0089 | 32330 | | 2601 | 14423 |
| 108 | 0076 | -0010 | 32665 | | 2625 | 14468 |
| 108 | 0100 | 0108 | 33147 | | 2657 | 14533 |
| 108 | 0150 | 0257 | 33767 | | 2696 | 14615 |
| 108 | 0201 | 0347 | 34127 | | 2717 | 14667 |
| 108 | 0225 | 0387 | 34326 | | 2729 | 14691 |
| 108 | 0250 | 0402 | 34424 | | 2735 | 14703 |
| 108 | 0300 | 0418 | 34543 | | 2743 | 14719 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 0845 | 30486 | | 2369 | 14788 | 0000 | 00000 | 4211 |
| 0010 | 0603 | 30554 | | 2407 | 14695 | 0041 | 00002 | 3857 |
| 0020 | 0120 C | 3141 D | | 2518 | 14501 | 0074 | 00007 | 2797 |
| 0030 | -0119 | 31920 | | 2569 | 14400 | 0100 | 00013 | 2310 |
| 0050 | -0089 | 32330 | | 2601 | 14423 | 0143 | 00031 | 2003 |
| 0075 | -0014 | 32650 | | 2624 | 14466 | 0191 | 00061 | 1785 |
| 0100 | 0108 | 33147 | | 2657 | 14533 | 0232 | 00097 | 1471 |
| 0125 | 0194 | 3351 B | | 2680 | 14580 | 0266 | 00137 | 1258 |
| 0150 | 0257 | 33767 | | 2696 | 14615 | 0296 | 00178 | 1111 |
| 0175 | 0305 | 3396 C | | 2707 | 14643 | 0323 | 00223 | 1012 |
| 0200 | 0346 | 34121 | | 2716 | 14667 | 0347 | 00270 | 0927 |
| 0225 | 0387 | 34326 | | 2729 | 14691 | 0369 | 00318 | 0816 |
| 0250 | 0402 | 34424 | | 2735 | 14703 | 0389 | 00366 | 0760 |
| 0300 | 0418 | 34543 | | 2743 | 14719 | 0426 | 00469 | 0693 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 315 | WAVES 1 3251 | AIR T | | VIS 8 |
| CONS. NO 014 | MONTH 6 | MXSAMPD 03 | WAVES 2 XX | WET B | | STN |
| LAT 49-018N | DAY 18 | NO.DPTH 13 | WND-DIR 320 | WW-CODE | 02 | |
| LON 64-116W | HR 11.7 | W-COLOR | WND-SPD 12 | CLD-TPE | 0 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1013.0 | CLD-AMT | 5 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 117 | 0000 | 0945 | 29941 | | 2312 | 14819 |
| 117 | 0010 | 0720 | 30527 | | 2390 | 14741 |
| 117 | 0020 | 0149 | 31417 | | 2516 | 14514 |
| 117 | 0030 | -0030 | 31709 | | 2549 | 14438 |
| 117 | 0040 | -0086 | 31980 | | 2573 | 14418 |
| 117 | 0050 | -0111 | 32159 | | 2588 | 14410 |
| 117 | 0076 | -0034 | 32570 | | 2618 | 14456 |
| 117 | 0099 | 0064 | 32999 | | 2648 | 14511 |
| 117 | 0150 | 0233 | 33695 | | 2692 | 14604 |
| 117 | 0200 | 0318 | 34034 | | 2712 | 14654 |
| 117 | 0225 | 0358 | 34177 | | 2720 | 14677 |
| 117 | 0250 | 0392 | 34351 | | 2730 | 14698 |
| 117 | 0301 | 0420 | 34560 | | 2744 | 14721 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 0945 | 29941 | | 2312 | 14819 | 0000 | 00000 | 4759 |
| 0010 | 0720 | 30527 | | 2390 | 14741 | 0044 | 00002 | 4016 |
| 0020 | 0149 | 31417 | | 2516 | 14514 | 0078 | 00007 | 2811 |
| 0030 | -0030 | 31709 | | 2549 | 14438 | 0105 | 00014 | 2500 |
| 0050 | -0111 | 32159 | | 2588 | 14410 | 0152 | 00032 | 2127 |
| 0075 | -0039 | 32554 | | 2617 | 14453 | 0202 | 00064 | 1848 |
| 0100 | 0068 | 33016 | | 2649 | 14513 | 0244 | 00102 | 1547 |
| 0125 | 0160 | 33398 | | 2674 | 14563 | 0280 | 00143 | 1314 |
| 0150 | 0233 | 33695 | | 2692 | 14604 | 0311 | 00187 | 1146 |
| 0175 | 0281 | 3389 B | | 2704 | 14632 | 0339 | 00232 | 1040 |
| 0200 | 0318 | 34034 | | 2712 | 14654 | 0364 | 00281 | 0966 |
| 0225 | 0358 | 34177 | | 2720 | 14677 | 0388 | 00332 | 0899 |
| 0250 | 0392 | 34351 | | 2730 | 14698 | 0409 | 00384 | 0804 |
| 0300 | 0420 | 34556 | | 2743 | 14720 | 0447 | 00490 | 0685 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | | WAVES 1 3251 | | AIR T | | VIS | 8 |
| CONS. NO 015 | MONTH 6 | MXSAMPD | 03 | WAVES 2 XX | | WET B | | STN | |
| LAT 48-598N | DAY 18 | NO.DPTH | 13 | WND-DIR 320 | | WW-CODE | 01 | | |
| LON 64-123W | HR 12.4 | W-COLOR | | WND-SPD 12 | | CLD-TPE | 0 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO 1013.5 | | CLD-AMT | 2 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 124 | 0000 | 0935 | 28679 | | 2215 | 14799 |
| 124 | 0010 | 0868 | 30250 | | 2348 | 14795 |
| 124 | 0020 | 0620 | 30559 | | 2405 | 14704 |
| 124 | 0029 | 0116 | 31488 | | 2524 | 14502 |
| 124 | 0039 | -0068 | 31862 | | 2563 | 14424 |
| 124 | 0049 | -0104 | 31979 | | 2573 | 14411 |
| 124 | 0075 | -0051 | 32015 | | 2574 | 14440 |
| 124 | 0098 | 0049 | 32464 | | 2606 | 14496 |
| 124 | 0149 | 0168 | 32867 | | 2631 | 14564 |
| 124 | 0200 | 0287 | 33403 | | 2665 | 14632 |
| 124 | 0225 | 0340 | 33856 | | 2696 | 14665 |
| 124 | 0250 | 0388 | 34116 | | 2712 | 14693 |
| 124 | 0302 | 0420 | 34329 | | 2725 | 14718 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 0935 | 28679 | | 2215 | 14799 | 0000 | 00000 | 5684 |
| 0010 | 0868 | 30250 | | 2348 | 14795 | 0051 | 00002 | 4420 |
| 0020 | 0620 | 30559 | | 2405 | 14703 | 0092 | 00009 | 3874 |
| 0030 | 0085 B | 3155 B | | 2530 | 14489 | 0125 | 00017 | 2676 |
| 0050 | -0105 | 31979 | | 2573 | 14411 | 0175 | 00037 | 2267 |
| 0075 | -0051 | 32015 | | 2574 | 14440 | 0232 | 00073 | 2256 |
| 0100 | 0055 | 3249 B | | 2607 | 14500 | 0285 | 00120 | 1943 |
| 0125 | 0121 B | 3272 H | | 2622 | 14537 | 0332 | 00174 | 1803 |
| 0150 | 0170 | 32874 | | 2631 | 14565 | 0376 | 00237 | 1719 |
| 0175 | 0230 | 3310 C | | 2645 | 14598 | 0418 | 00306 | 1593 |
| 0200 | 0287 | 33403 | | 2665 | 14632 | 0456 | 00378 | 1413 |
| 0225 | 0340 | 33856 | | 2696 | 14665 | 0488 | 00448 | 1122 |
| 0250 | 0388 | 34116 | | 2712 | 14693 | 0514 | 00512 | 0976 |
| 0300 | 0420 | 34333 | | 2726 | 14717 | 0560 | 00641 | 0852 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 161 | WAVES 1 3252 | AIR T | | VIS | 8 |
| CONS. NO 016 | MONTH 6 | MXSAMPD 01 | WAVES 2 XX | WET B | | STN | |
| LAT 48-587N | DAY 18 | NO.DPTH 8 | WND-DIR 320 | WW-CODE | 02 | | |
| LON 64-150W | HR 13.1 | W-COLOR | WND-SPD 12 | CLD-TPE | 0 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1014.0 | CLD-AMT | 2 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 131 | 0000 | 1120 | 26698 | | 2032 | 14842 |
| 131 | 0010 | 0854 | 30185 | | 2345 | 14789 |
| 131 | 0021 | 0569 | 30867 | | 2435 | 14687 |
| 131 | 0030 | 0077 | 31578 | | 2533 | 14486 |
| 131 | 0040 | -0035 | 31760 | | 2553 | 14438 |
| 131 | 0066 | -0075 | 32266 | | 2595 | 14431 |
| 131 | 0089 | -0020 | 32658 | | 2625 | 14466 |
| 131 | 0140 | 0144 | 33285 | | 2666 | 14557 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1120 | 26698 | | 2032 | 14842 | 0000 | 00000 | 7438 |
| 0010 | 0854 | 30185 | | 2345 | 14789 | 0060 | 00002 | 4449 |
| 0020 | 0602 B | 3087 I | | 2432 | 14700 | 0100 | 00008 | 3621 |
| 0030 | 0077 | 31578 | | 2533 | 14486 | 0132 | 00016 | 2648 |
| 0050 | -0078 C | 31956 | | 2570 | 14423 | 0181 | 00036 | 2293 |
| 0075 | -0059 | 32427 | | 2608 | 14442 | 0235 | 00070 | 1938 |
| 0100 | -0016 D | 32816 | | 2637 | 14471 | 0280 | 00110 | 1657 |
| 0125 | 0070 B | 33131 | | 2658 | 14519 | 0319 | 00155 | 1460 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 49 | WAVES 1 3252 | AIR T | | VIS | 8 |
| CONS. NO 017 | MONTH 6 | MXSAMPD 00 | WAVES 2 XX | WET B | | STN | |
| LAT 48-574N | DAY 18 | NO.DPTH 4 | WND-DIR 320 | WW-CODE | 02 | | |
| LON 64-172W | HR 13.6 | W-COLOR | WND-SPD 15 | CLD-TPE | 0 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1014.0 | CLD-AMT | 2 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 136 | 0000 | 1025 | 26074 | | 1999 | 14800 |
| 136 | 0010 | 0975 | 26267 | | 2022 | 14785 |
| 136 | 0021 | 0675 | 30333 | | 2380 | 14723 |
| 136 | 0030 | 0243 | 31098 | | 2484 | 14553 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1025 | 26074 | | 1999 | 14800 | 0000 | 00000 | 7756 |
| 0010 | 0975 | 26267 | | 2022 | 14785 | 0077 | 00004 | 7540 |
| 0020 | 0713 | 2995 I | | 2346 | 14733 | 0137 | 00012 | 4439 |
| 0030 | 0243 | 31098 | | 2484 | 14553 | 0175 | 00022 | 3115 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 333 | WAVES 1 3450 | AIR T | | VIS | 8 |
| CONS. NO 018 | MONTH 6 | MXSAMPD 03 | WAVES 2 XX | WET B | | STN | |
| LAT 49-052N | DAY 19 | NO.DPTH 1 | WND-DIR 330 | WW-CODE | 02 | | |
| LON 64-052W | HR 19.0 | W-COLOR | WND-SPD 05 | CLD-TPE | 6 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1022.5 | CLD-AMT | 1 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 190 | 0310 | 0420 | 35703 | | 2834 | 14738 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 192 | WAVES 1 3251 | AIR T | | VIS | 8 |
| CONS. NO 019 | MONTH 6 | MXSAMPD 02 | WAVES 2 3201 | WET B | | STN | |
| LAT 49-208N | DAY 19 | NO.DPTH 1 | WND-DIR 330 | WW-CODE | 01 | | |
| LON 63-401W | HR 22.4 | W-COLOR | WND-SPD 05 | CLD-TPE | 0 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1021.7 | CLD-AMT | 1 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 224 | 0174 | 0301 | 33970 | | 2708 | 14641 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 344 | WAVES 1 | XX | AIR T | | VIS | 8 |
| CONS. NO 020 | MONTH 6 | MXSAMPD | 03 | WAVES 2 | XX | WET B | | STN | |
| LAT 49-143N | DAY 20 | NO.DPTH | 1 | WND-DIR | 210 | WW-CODE | 01 | | |
| LON 64-357W | HR 03.8 | W-COLOR | | WND-SPD | 04 | CLD-TPE | 1 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1021.1 | CLD-AMT | 1 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 038 | 0314 | 0422 | 34581 | | 2745 | 14724 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 60 | WAVES 1 3150 | AIR T | | VIS | 8 |
| CONS. NO 021 | MONTH 6 | MXSAMPD 00 | WAVES 2 3200 | WET B | | STN | |
| LAT 49-583N | DAY 20 | NO.DPTH 1 | WND-DIR 120 | WW-CODE | 02 | | |
| LON 64-089W | HR 11.5 | W-COLOR | WND-SPD 05 | CLD-TPE | 3 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1021.9 | CLD-AMT | 3 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 115 | 0049 | -0034 | 32071 | | 2578 | 14445 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 60 | WAVES 1 3650 | AIR T | | VIS | 8 |
| CONS. NO 022 | MONTH 6 | MXSAMPD 00 | WAVES 2 0601 | WET B | | STN | |
| LAT 50-063N | DAY 20 | NO.DPTH 1 | WND-DIR 340 | WW-CODE | 02 | | |
| LON 64-083W | HR 13.1 | W-COLOR | WND-SPD 01 | CLD-TPE | 0 | | |
| MARSD SQ 187 | C/I 1810 | W-TRNSP | BARO 1021.2 | CLD-AMT | 1 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 131 | 0039 | 0039 | 31991 | | 2568 | 14475 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 115 | WAVES 1 | XX | AIR T | | VIS | 8 |
| CONS. NO 023 | MONTH 6 | MXSAMPD | 01 | WAVES 2 | 4901 | WET B | | STN | |
| LAT 50-110N | DAY 20 | NO.DPTH | 1 | WND-DIR | 120 | WW-CODE | 03 | | |
| LON 64-554W | HR 17.2 | W-COLOR | | WND-SPD | 04 | CLD-TPE | 6 | | |
| MARSD SQ 187 | C/I 1810 | W-TRNSP | | BARO | 1021.6 | CLD-AMT | 4 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 172 | 0088 | -0063 | 32388 | | 2605 | 14442 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO | 007 | YR | 1967 | DEPTH | 262 | WAVES 1 | XX | AIR T | | VIS | 8 |
| CONS. NO | 024 | MONTH | 6 | MXSAMPD | 02 | WAVES 2 | XX | WET B | | STN | |
| LAT | 49-439N | DAY | 20 | NO.DPTH | 1 | WND-DIR | 210 | WW-CODE | 01 | | |
| LON | 65-019W | HR | 20.6 | W-COLOR | | WND-SPD | 05 | CLD-TPE | 1 | | |
| MARSD SQ | 151 | C/I | 1810 | W-TRNSP | | BARO | 1021.1 | CLD-AMT | 2 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 206 | 0247 | 0418 | 34555 | | 2744 | 14711 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 357 | WAVES 1 | XX | AIR T | | VIS | 8 |
| CONS. NO 025 | MONTH 6 | MXSAMPD | 03 | WAVES 2 | 1101 | WET B | | STN | |
| LAT 49-217N | DAY 20 | NO.DPTH | 1 | WND-DIR | 160 | WW-CODE | 03 | | |
| LON 65-067W | HR 23.8 | W-COLOR | | WND-SPD | 05 | CLD-TPE | 7 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1021.0 | CLD-AMT | 8 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 238 | 0317 | 0423 | 34612 | | 2748 | 14725 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 335 | WAVES 1 XX | AIR T | | VIS | 8 |
| CONS. NO 026 | MONTH 6 | MXSAMPD 03 | WAVES 2 XX | WET B | | STN | |
| LAT 49-316N | DAY 21 | NO.DPTH 1 | WND-DIR 210 | WW-CODE | 01 | | |
| LON 65-405W | HR 03.9 | W-COLOR | WND-SPD 01 | CLD-TPE | 0 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1021.3 | CLD-AMT | 3 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 039 | 0327 | 0425 | 34597 | | 2746 | 14727 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 137 | WAVES 1 | XX | AIR T | | VIS | 8 |
| CONS. NO 027 | MONTH 6 | MXSAMPD | 01 | WAVES 2 | XX | WET B | | STN | |
| LAT 49-175N | DAY 21 | NO.DPTH | 1 | WND-DIR | 240 | WW-CODE | 02 | | |
| LON 65-397W | HR 06.0 | W-COLOR | | WND-SPD | 10 | CLD-TPE | 0 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1020.8 | CLD-AMT | 1 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 060 | 0123 | 0102 | 33102 | | 2654 | 14533 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 335 | WAVES 1 0551 | AIR T | | VIS | 8 |
| CONS. NO 028 | MONTH 6 | MXSAMPD 03 | WAVES 2 0851 | WET B | | STN | |
| LAT 49-423N | DAY 21 | NO.DPTH 1 | WND-DIR 080 | WW-CODE | 01 | | |
| LON 66-173W | HR 14.3 | W-COLOR | WND-SPD 10 | CLD-TPE | 4 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1022.9 | CLD-AMT | 6 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 143 | 0328 | 0425 | 34586 | | 2745 | 14727 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 298 | WAVES 1 0950 | AIR T | | VIS 8 |
| CONS. NO 029 | MONTH 6 | MXSAMPD 03 | WAVES 2 0751 | WET B | | STN |
| LAT 49-199N | DAY 21 | NO.DPTH 2 | WND-DIR 080 | WW-CODE 02 | | |
| LON 66-120W | HR 17.4 | W-COLOR | WND-SPD 05 | CLD-TPE 5 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1020.3 | CLD-AMT 8 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 174 | 0000 | 1040 | | | | |
| 174 | 0275 | 0421 | 34558 | | 2743 | 14717 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 201 | WAVES 1 XX | AIR T | | VIS | 7 |
| CONS. NO 030 | MONTH 6 | MXSAMPD 02 | WAVES 2 1651 | WET B | | STN | |
| LAT 49-088N | DAY 21 | NO.DPTH 1 | WND-DIR 060 | WW-CODE | 02 | | |
| LON 66-421W | HR 21.1 | W-COLOR | WND-SPD 06 | CLD-TPE | 5 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1018.0 | CLD-AMT | 8 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 211 | 0179 | 0289 | 33908 | | 2705 | 14636 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 216 | WAVES 1 0951 | | AIR T | | VIS | 6 |
| CONS. NO 031 | MONTH 6 | MXSAMPD | 00 | WAVES 2 0662 | | WET B | | STN | |
| LAT 49-258N | DAY 22 | NO.DPTH | 1 | WND-DIR | 060 | WW-CODE | 02 | | |
| LON 67-048W | HR 00.5 | W-COLOR | | WND-SPD | 07 | CLD-TPE | 6 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1016.3 | CLD-AMT | 7 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 005 | 0036 | 0100 | 31751 | | 2546 | 14499 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 282 | WAVES 1 | XX | AIR T | | VIS | 7 |
| CONS. NO 032 | MONTH 6 | MXSAMPD | 03 | WAVES 2 | XX | WET B | | STN | |
| LAT 49-175N | DAY 22 | NO.DPTH | 1 | WND-DIR | 040 | WW-CODE | 00 | | |
| LON 67-227W | HR 03.3 | W-COLOR | | WND-SPD | 12 | CLD-TPE | X | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1014.9 | CLD-AMT | 9 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 033 | 0262 | 0410 | 34218 | | 2718 | 14705 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 79 | WAVES 1 | XX | AIR T | | VIS | 6 |
| CONS. NO 033 | MONTH 6 | MXSAMPD | 01 | WAVES 2 | XX | WET B | | STN | |
| LAT 48-250N | DAY 23 | NO.DPTH | 6 | WND-DIR | 080 | WW-CODE | 10 | | |
| LON 70-505W | HR 08.9 | W-COLOR | | WND-SPD | 01 | CLD-TPE | 7 | | |
| MARSD SQ 152 | C/I 1810 | W-TRNSP | | BARO | 1009.5 | CLD-AMT | 8 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 089 | 0009 | 0080 | 26672 | 690 | 2140 | 14416 |
| 089 | 0018 | 0056 | 27433 | 660 | 2202 | 14417 |
| 089 | 0026 | 0042 | 27703 | 670 | 2224 | 14416 |
| 089 | 0035 | 0041 | 27988 | 670 | 2247 | 14421 |
| 089 | 0044 | 0039 | 28321 | 600 | 2274 | 14426 |
| 089 | 0067 | 0046 | 28643 | 540 | 2299 | 14437 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 260 | WAVES 1 | XX | AIR T | | VIS | 6 |
| CONS. NO 034 | MONTH 6 | MXSAMPD | 02 | WAVES 2 | XX | WET B | | STN | |
| LAT 48-220N | DAY 23 | NO.DPTH | 10 | WND-DIR | 080 | WW-CODE | 10 | | |
| LON 70-339W | HR 10.6 | W-COLOR | | WND-SPD | 02 | CLD-TPE | 7 | | |
| MARSD SQ 152 | C/I 1810 | W-TRNSP | | BARO | 1009.7 | CLD-AMT | 8 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 106 | 0010 | 0348 | 21936 | 700 | 1749 | 14474 |
| 106 | 0021 | 0080 | 27454 | 710 | 2203 | 14429 |
| 106 | 0030 | 0063 | 28074 | 700 | 2253 | 14431 |
| 106 | 0040 | 0054 | 28419 | 700 | 2281 | 14433 |
| 106 | 0050 | 0050 | 28658 | 690 | 2300 | 14436 |
| 106 | 0076 | 0058 | 29004 | 680 | 2328 | 14449 |
| 106 | 0101 | 0052 | 29207 | 670 | 2344 | 14453 |
| 106 | 0150 | 0111 | 30255 | 560 | 2426 | 14503 |
| 106 | 0201 | 0083 | | 600 | | |
| 106 | 0226 | 0076 | 30313 | 600 | 2432 | 14500 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 262 | WAVES 1 0850 | AIR T | | VIS | 6 |
| CONS. NO 035 | MONTH 6 | MXSAMPD 02 | WAVES 2 XX | WET B | | STN | |
| LAT 48-214N | DAY 23 | NO.DPTH 10 | WND-DIR 080 | WW-CODE | 10 | | |
| LON 70-234W | HR 11.7 | W-COLOR | WND-SPD 05 | CLD-TPE | 7 | | |
| MARSD SQ 152 | C/I 1810 | W-TRNSP | BARO 1009.8 | CLD-AMT | 8 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 117 | 0010 | 0315 | 22433 | 700 | 1791 | 14466 |
| 117 | 0026 | 0091 | 27588 | 710 | 2213 | 14437 |
| 117 | 0035 | 0079 | 28168 | 700 | 2260 | 14441 |
| 117 | 0045 | 0075 | 28549 | 700 | 2291 | 14446 |
| 117 | 0055 | 0063 | 28747 | 700 | 2307 | 14444 |
| 117 | 0081 | 0089 | 29108 | 680 | 2335 | 14465 |
| 117 | 0106 | 0093 | 29272 | 680 | 2348 | 14474 |
| 117 | 0155 | 0101 | 29846 | 660 | 2393 | 14493 |
| 117 | 0206 | 0073 | 30266 | 620 | 2428 | 14495 |
| 117 | 0231 | 0067 | 30320 | 620 | 2433 | 14497 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO | 007 | YR 1967 | DEPTH | 260 | WAVES 1 | XX | AIR T | | VIS 6 |
| CONS. NO | 036 | MONTH 6 | MXSAMPD | 02 | WAVES 2 | XX | WET B | | STN |
| LAT | 48-176N | DAY 23 | NO.DPTH | 10 | WND-DIR | 140 | WW-CODE | 10 | |
| LON | 70-142W | HR 12.9 | W-COLOR | | WND-SPD | 05 | CLD-TPE | 7 | |
| MARSD SQ | 152 | C/I 1810 | W-TRNSP | | BARO | 1010.0 | CLD-AMT | 8 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 129 | 0010 | 0327 | 23451 | 710 | 1871 | 14484 |
| 129 | 0021 | 0154 | 26810 | 710 | 2148 | 14454 |
| 129 | 0030 | 0205 | 27785 | 700 | 2223 | 14491 |
| 129 | 0040 | 0093 | 28339 | 700 | 2273 | 14450 |
| 129 | 0050 | 0087 | 28505 | 690 | 2287 | 14451 |
| 129 | 0076 | 0103 | 29039 | 700 | 2329 | 14470 |
| 129 | 0101 | 0106 | 29293 | 680 | 2349 | 14479 |
| 129 | 0150 | 0077 | 29901 | 630 | 2399 | 14482 |
| 129 | 0201 | 0064 | 30225 | 620 | 2425 | 14489 |
| 129 | 0226 | 0064 | 30291 | 620 | 2431 | 14494 |

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|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 187 | WAVES 1 | XX | AIR T | | VIS | 7 |
| CONS. NO 037 | MONTH 6 | MXSAMPD | 01 | WAVES 2 | XX | WET B | | STN | |
| LAT 48-153N | DAY 23 | NO.DPTH | 8 | WND-DIR | 090 | WW-CODE | 01 | | |
| LON 70-040W | HR 14.0 | W-COLOR | | WND-SPD | 04 | CLD-TPE | 6 | | |
| MARSD SQ 152 | C/I 1810 | W-TRNSP | | BARO | 1009.0 | CLD-AMT | 5 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 140 | 0010 | 0784 | | 690 | | |
| 140 | 0021 | 0292 | 25818 | 710 | 2061 | 14502 |
| 140 | 0030 | 0161 | 28073 | 700 | 2248 | 14476 |
| 140 | 0040 | 0149 | 28473 | 700 | 2281 | 14477 |
| 140 | 0050 | 0121 | 28715 | 700 | 2302 | 14470 |
| 140 | 0076 | 0145 | 29122 | 710 | 2333 | 14490 |
| 140 | 0101 | 0138 | 29299 | 690 | 2348 | 14494 |
| 140 | 0150 | 0068 | 30070 | 630 | 2413 | 14480 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 146 | WAVES 1 00X0 | AIR T | | VIS | 7 |
| CONS. NO 038 | MONTH 6 | MXSAMPD 01 | WAVES 2 00X0 | WET B | | STN | |
| LAT 48-134N | DAY 23 | NO.DPTH 7 | WND-DIR CALM | WW-CODE | 03 | | |
| LON 69-533W | HR 15.2 | W-COLOR | WND-SPD 00 | CLD-TPE | 6 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1009.0 | CLD-AMT | 8 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 152 | 0010 | 0407 | 23443 | 710 | 1865 | 14519 |
| 152 | 0021 | 0254 | 27379 | 710 | 2187 | 14506 |
| 152 | 0030 | 0206 | 28328 | 710 | 2266 | 14499 |
| 152 | 0040 | 0186 | 28597 | 710 | 2289 | 14496 |
| 152 | 0050 | 0167 | 28809 | 710 | 2307 | 14492 |
| 152 | 0076 | 0164 | 29096 | 710 | 2330 | 14498 |
| 152 | 0101 | 0167 | 29178 | 710 | 2336 | 14505 |

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|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 230 | WAVES 1 | XX | AIR T | | VIS | 7 |
| CONS. NO 039 | MONTH 6 | MXSAMPD | 02 | WAVES 2 | XX | WET B | | STN | |
| LAT 48-085N | DAY 23 | NO.DPTH | 9 | WND-DIR | 100 | WW-CODE | 01 | | |
| LON 69-462W | HR 16.2 | W-COLOR | | WND-SPD | 05 | CLD-TPE | 6 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1008.8 | CLD-AMT | 7 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 162 | 0010 | 0489 | 25376 | 720 | 2011 | 14580 |
| 162 | 0021 | 0390 | 27762 | 720 | 2208 | 14571 |
| 162 | 0030 | 0302 | 28051 | 720 | 2238 | 14538 |
| 162 | 0040 | 0262 | 28606 | 720 | 2285 | 14529 |
| 162 | 0050 | 0265 | 28655 | 720 | 2288 | 14533 |
| 162 | 0076 | 0270 | 28865 | 720 | 2305 | 14542 |
| 162 | 0101 | 0243 | 29195 | 730 | 2333 | 14539 |
| 162 | 0150 | 0238 | 29709 | 720 | 2374 | 14552 |
| 162 | 0201 | 0220 | 29935 | 720 | 2393 | 14555 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 146 | WAVES 1 00X0 | AIR T | | VIS | 7 |
| CONS. NO 040 | MONTH 6 | MXSAMPD 01 | WAVES 2 00X0 | WET B | | STN | |
| LAT 48-077N | DAY 23 | NO.DPTH 7 | WND-DIR CALM | WW-CODE | 01 | | |
| LON 69-425W | HR 17.0 | W-COLOR | WND-SPD 00 | CLD-TPE | 3 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1008.0 | CLD-AMT | 6 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 170 | 0010 | 0717 | 26769 | 760 | 2096 | 14692 |
| 170 | 0021 | 0709 | 26803 | 750 | 2100 | 14691 |
| 170 | 0030 | 0692 | 26863 | 750 | 2106 | 14686 |
| 170 | 0040 | 0662 | 26985 | 750 | 2119 | 14677 |
| 170 | 0050 | 0623 | 27114 | 740 | 2134 | 14665 |
| 170 | 0076 | 0453 | 27829 | 730 | 2207 | 14608 |
| 170 | 0101 | 0322 | 28866 | 720 | 2301 | 14569 |

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|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 134 | WAVES 1 | XX | AIR T | | VIS | 6 |
| CONS. NO 041 | MONTH 6 | MXSAMPD | 01 | WAVES 2 | XX | WET B | | STN | |
| LAT 48-098N | DAY 23 | NO.DPTH | 7 | WND-DIR | 260 | WW-CODE | 03 | | |
| LON 69-341W | HR 18.3 | W-COLOR | | WND-SPD | 01 | CLD-TPE | 6 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1006.8 | CLD-AMT | 8 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 183 | 0010 | 0476 | 28217 | 730 | 2236 | 14612 |
| 183 | 0021 | 0015 | 31582 | 740 | 2537 | 14456 |
| 183 | 0030 | -0038 | 31990 | 740 | 2572 | 14438 |
| 183 | 0040 | -0048 | 32282 | 710 | 2596 | 14440 |
| 183 | 0050 | -0032 | 32495 | 670 | 2612 | 14452 |
| 183 | 0076 | 0020 | 32740 | 640 | 2630 | 14483 |
| 183 | 0100 | 0136 | 33235 | 490 | 2663 | 14546 |

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|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 322 | WAVES 1 | XX | AIR T | | VIS | 6 |
| CONS. NO 042 | MONTH 6 | MXSAMPD | 03 | WAVES 2 | XX | WET B | | STN | |
| LAT 48-160N | DAY 23 | NO.DPTH | 12 | WND-DIR | 280 | WW-CODE | 02 | | |
| LON 69-244W | HR 19.7 | W-COLOR | | WND-SPD | 01 | CLD-TPE | 6 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1006.3 | CLD-AMT | 8 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 197 | 0010 | 0703 | 26701 | 760 | 2092 | 14685 |
| 197 | 0021 | 0537 | 27619 | 730 | 2183 | 14631 |
| 197 | 0030 | 0032 | 31413 | 720 | 2522 | 14463 |
| 197 | 0040 | -0041 | 32053 | 730 | 2577 | 14440 |
| 197 | 0050 | -0056 | 32261 | 710 | 2594 | 14437 |
| 197 | 0076 | 0017 | 32721 | 620 | 2628 | 14482 |
| 197 | 0100 | 0060 | 32933 | 570 | 2643 | 14508 |
| 197 | 0150 | 0201 | 33502 | 430 | 2679 | 14587 |
| 197 | 0201 | 0295 | 33911 | 340 | 2704 | 14642 |
| 197 | 0226 | 0337 | 34101 | 300 | 2716 | 14667 |
| 197 | 0251 | 0373 | 34255 | 260 | 2724 | 14688 |
| 197 | 0302 | 0379 | 34286 | 260 | 2726 | 14700 |

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|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 324 | WAVES 1 | XX | AIR T | | VIS | 8 |
| CONS. NO 043 | MONTH 6 | MXSAMPD | 03 | WAVES 2 | XX | WET B | | STN | |
| LAT 49-045N | DAY 24 | NO.DPTH | 1 | WND-DIR | 220 | WW-CODE | 00 | | |
| LON 67-143W | HR 06.9 | W-COLOR | | WND-SPD | 05 | CLD-TPE | X | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1006.4 | CLD-AMT | 9 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 069 | 0301 | 0413 | 34486 | | 2739 | 14717 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 300 | WAVES 1 2851 | AIR T | | VIS | 8 |
| CONS. NO 044 | MONTH 6 | MXSAMPD 02 | WAVES 2 2451 | WET B | | STN | |
| LAT 49-220N | DAY 24 | NO.DPTH 12 | WND-DIR 240 | WW-CODE | 02 | | |
| LON 66-512W | HR 13.7 | W-COLOR | WND-SPD 06 | CLD-TPE | 1 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1009.9 | CLD-AMT | 1 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 137 | 0000 | 1150 | 27729 | | 2107 | 14866 |
| 137 | 0010 | 0237 | 31357 | | 2505 | 14551 |
| 137 | 0021 | 0123 | 31708 | | 2541 | 14507 |
| 137 | 0030 | 0062 | 31828 | | 2554 | 14482 |
| 137 | 0040 | 0015 | 32019 | | 2572 | 14465 |
| 137 | 0050 | -0022 | 32170 | | 2586 | 14452 |
| 137 | 0076 | -0024 | 32555 | | 2617 | 14460 |
| 137 | 0100 | 0039 | 32823 | | 2635 | 14497 |
| 137 | 0150 | 0241 | 33694 | | 2692 | 14607 |
| 137 | 0201 | 0337 | 34080 | | 2714 | 14663 |
| 137 | 0225 | 0370 | 34233 | | 2723 | 14683 |
| 137 | 0250 | 0416 | 34496 | | 2739 | 14710 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1150 | 27729 | | 2107 | 14866 | 0000 | 00000 | 6721 |
| 0010 | 0237 | 31357 | | 2505 | 14551 | 0048 | 00001 | 2915 |
| 0020 | 0113 D | 3176 I | | 2546 | 14503 | 0076 | 00006 | 2530 |
| 0030 | 0062 | 31828 | | 2554 | 14482 | 0101 | 00012 | 2450 |
| 0050 | -0022 | 32170 | | 2586 | 14452 | 0147 | 00031 | 2150 |
| 0075 | -0026 | 32541 | | 2616 | 14459 | 0198 | 00063 | 1863 |
| 0100 | 0039 | 32823 | | 2635 | 14497 | 0242 | 00102 | 1678 |
| 0125 | 0141 C | 3326 H | | 2665 | 14553 | 0281 | 00147 | 1404 |
| 0150 | 0241 | 33694 | | 2692 | 14607 | 0313 | 00192 | 1153 |
| 0175 | 0297 | 3392 D | | 2705 | 14639 | 0341 | 00237 | 1031 |
| 0200 | 0336 | 34075 | | 2714 | 14662 | 0366 | 00285 | 0952 |
| 0225 | 0370 | 34233 | | 2723 | 14683 | 0389 | 00335 | 0868 |
| 0250 | 0416 | 34496 | | 2739 | 14710 | 0409 | 00384 | 0721 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 316 | WAVES 1 1951 | AIR T | | VIS | 8 |
| CONS. NO 045 | MONTH 6 | MXSAMPD 02 | WAVES 2 2351 | WET B | | STN | |
| LAT 49-170N | DAY 24 | NO.DPTH 12 | WND-DIR 250 | WW-CODE | 02 | | |
| LON 66-484W | HR 14.6 | W-COLOR | WND-SPD 07 | CLD-TPE | 1 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1010.0 | CLD-AMT | 1 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 146 | 0000 | 1200 | 28977 | | 2195 | 14899 |
| 146 | 0010 | 0507 | 30670 | | 2427 | 14657 |
| 146 | 0020 | 0192 | 31314 | | 2505 | 14532 |
| 146 | 0030 | -0058 | 31887 | | 2564 | 14428 |
| 146 | 0040 | -0099 | 32186 | | 2590 | 14414 |
| 146 | 0050 | -0084 | 32337 | | 2601 | 14425 |
| 146 | 0076 | 0016 | 32722 | | 2628 | 14481 |
| 146 | 0099 | 0100 | 33101 | | 2654 | 14528 |
| 146 | 0150 | 0251 | 33670 | | 2689 | 14611 |
| 146 | 0200 | 0344 | 34124 | | 2717 | 14666 |
| 146 | 0224 | 0389 | 34324 | | 2728 | 14692 |
| 146 | 0249 | 0415 | 34465 | | 2737 | 14709 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1200 | 28977 | | 2195 | 14899 | 0000 | 00000 | 5881 |
| 0010 | 0507 | 30670 | | 2427 | 14657 | 0048 | 00002 | 3667 |
| 0020 | 0192 | 31314 | | 2505 | 14532 | 0081 | 00007 | 2917 |
| 0030 | -0058 | 31887 | | 2564 | 14428 | 0108 | 00013 | 2354 |
| 0050 | -0084 | 32337 | | 2601 | 14425 | 0151 | 00031 | 1999 |
| 0075 | 0011 | 32707 | | 2627 | 14479 | 0199 | 00061 | 1753 |
| 0100 | 0103 | 33114 | | 2655 | 14530 | 0239 | 00097 | 1492 |
| 0125 | 0184 | 3342 B | | 2674 | 14574 | 0275 | 00138 | 1314 |
| 0150 | 0251 | 33670 | | 2689 | 14611 | 0306 | 00182 | 1179 |
| 0175 | 0301 | 33907 | | 2703 | 14640 | 0334 | 00228 | 1045 |
| 0200 | 0344 | 34124 | | 2717 | 14666 | 0359 | 00276 | 0923 |
| 0225 | 0386 | 34321 | | 2728 | 14691 | 0381 | 00324 | 0819 |
| 0250 | 0416 | 34470 | | 2737 | 14709 | 0401 | 00371 | 0740 |

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|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 196 | WAVES 1 2751 | | AIR T | | VIS | 8 |
| CONS. NO 046 | MONTH 6 | MXSAMPD | 02 | WAVES 2 2951 | | WET B | | STN | |
| LAT 49-151N | DAY 24 | NO.DPTH | 1 | WND-DIR | 250 | WW-CODE | 03 | | |
| LON 66-110W | HR 19.0 | W-COLOR | | WND-SPD | 06 | CLD-TPE | 1 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1007.6 | CLD-AMT | 7 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 190 | 0185 | 0276 | 33823 | | 2699 | 14630 |

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|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 346 | WAVES 1 | XX | AIR T | | VIS | 8 |
| CONS. NO 047 | MONTH 6 | MXSAMPD | 03 | WAVES 2 | XX | WET B | | STN | |
| LAT 49-269N | DAY 25 | NO.DPTH | 1 | WND-DIR | 190 | WW-CODE | 03 | | |
| LON 65-403W | HR 06.1 | W-COLOR | | WND-SPD | 03 | CLD-TPE | 2 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1004.9 | CLD-AMT | 3 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 061 | 0318 | 0425 | 34574 | | 2744 | 14726 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 265 | WAVES 1 00X0 | AIR T | | VIS | 3 |
| CONS. NO 048 | MONTH 6 | MXSAMPD 03 | WAVES 2 00X0 | WET B | | STN | |
| LAT 49-438N | DAY 25 | NO.DPTH 1 | WND-DIR CALM | WW-CODE | 45 | | |
| LON 65-019W | HR 13.5 | W-COLOR | WND-SPD 00 | CLD-TPE | X | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1004.3 | CLD-AMT | 9 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 135 | 0252 | 0411 | 34473 | | 2738 | 14708 |

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|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 373 | WAVES 1 | XX | AIR T | | VIS | 6 |
| CONS. NO 049 | MONTH 6 | MXSAMPD | 04 | WAVES 2 | XX | WET B | | STN | |
| LAT 49-177N | DAY 26 | NO.DPTH | 1 | WND-DIR | 190 | WW-CODE | 45 | | |
| LON 64-338W | HR 03.7 | W-COLOR | | WND-SPD | 06 | CLD-TPE | X | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 997.5 | CLD-AMT | 9 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 037 | 0353 | 0423 | 34599 | | 2746 | 14731 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 329 | WAVES 1 0251 | AIR T | | VIS | 6 |
| CONS. NO 050 | MONTH 6 | MXSAMPD 03 | WAVES 2 3551 | WET B | | STN | |
| LAT 49-052N | DAY 26 | NO.DPTH 1 | WND-DIR 140 | WW-CODE | 43 | | |
| LON 64-059W | HR 09.1 | W-COLOR | WND-SPD 10 | CLD-TPE | X | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 995.9 | CLD-AMT | 9 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 091 | 0303 | 0419 | 34562 | | 2744 | 14721 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 470 | WAVES 1 0252 | AIR T | | VIS | 8 |
| CONS. NO 051 | MONTH 6 | MXSAMPD 05 | WAVES 2 1752 | WET B | | STN | |
| LAT 47-292N | DAY 27 | NO.DPTH 1 | WND-DIR 100 | WW-CODE | 01 | | |
| LON 59-355W | HR 09.5 | W-COLOR | WND-SPD 04 | CLD-TPE | 2 | | |
| MARSD SQ 150 | C/I 1810 | W-TRNSP | BARO 1013.1 | CLD-AMT | 1 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 095 | 0455 | 0422 | 34764 | | 2760 | 14750 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 119 | WAVES 1 | XX | AIR T | VIS |
| CONS. NO 052 | MONTH 7 | MXSAMPD | 01 | WAVES 2 | XX | WET B | STN |
| LAT 44-246N | DAY 05 | NO.DPTH | 8 | WND-DIR | | WW-CODE | |
| LON 63-304W | HR 17.5 | W-COLOR | | WND-SPD | | CLD-TPE | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | | CLD-AMT | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 175 | 0000 | 1450 | 30726 | | 2281 | 15005 |
| 175 | 0025 | 0864 | 30803 | | 2391 | 14803 |
| 175 | 0050 | 0285 | 31184 | | 2488 | 14576 |
| 175 | 0060 | 0188 | 31503 | | 2521 | 14539 |
| 175 | 0070 | 0168 | 31681 | | 2536 | 14535 |
| 175 | 0080 | 0182 | 31959 | | 2557 | 14546 |
| 175 | 0090 | 0210 | 32261 | | 2580 | 14564 |
| 175 | 0100 | 0217 | 32344 | | 2586 | 14570 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1450 | 30726 | | 2281 | 15005 | 0000 | 00000 | 5054 |
| 0010 | 1166 I | 3069 C | | 2333 | 14910 | 0048 | 00002 | 4558 |
| 0020 | 0911 I | 3072 E | | 2378 | 14819 | 0092 | 00009 | 4133 |
| 0030 | 0729 D | 3084 B | | 2414 | 14752 | 0132 | 00019 | 3793 |
| 0050 | 0285 | 31184 | | 2488 | 14576 | 0201 | 00047 | 3082 |
| 0075 | 0172 | 31812 | | 2546 | 14539 | 0271 | 00091 | 2525 |
| 0100 | 0217 | 32344 | | 2586 | 14570 | 0330 | 00143 | 2153 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 274 | WAVES 1 | XX | AIR T | VIS |
| CONS. NO 053 | MONTH 7 | MXSAMPD | 02 | WAVES 2 | XX | WET B | STN |
| LAT 43-450N | DAY 06 | NO.DPTH | 11 | WND-DIR | | WW-CODE | |
| LON 62-598W | HR 10.4 | W-COLOR | | WND-SPD | | CLD-TPE | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | | CLD-AMT | HW |

OBSERVED

| GMT | DEPTH | TEMP | SAL | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 104 | 0010 | 1059 | 30841 | | 2364 | 14874 |
| 104 | 0020 | 0753 | 31570 | | 2467 | 14770 |
| 104 | 0030 | 0384 | 32227 | | 2562 | 14629 |
| 104 | 0040 | 0317 | 32422 | | 2584 | 14605 |
| 104 | 0050 | 0303 | 32550 | | 2595 | 14602 |
| 104 | 0075 | 0277 | 32891 | | 2625 | 14600 |
| 104 | 0100 | 0425 | 33449 | | 2655 | 14675 |
| 104 | 0150 | 0592 | 34169 | | 2693 | 14761 |
| 104 | 0200 | 0557 | 34287 | | 2706 | 14757 |
| 104 | 0224 | 0564 | 34357 | | 2711 | 14765 |
| 104 | 0249 | 0565 | 34377 | | 2713 | 14769 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 95 | WAVES 1 | XX | AIR T | VIS |
| CONS. NO 054 | MONTH 7 | MXSAMPD | 01 | WAVES 2 | XX | WET B | STN |
| LAT 43-201N | DAY 06 | NO.DPTH | 6 | WND-DIR | | WW-CODE | |
| LON 62-401W | HR 19.9 | W-COLOR | | WND-SPD | | CLD-TPE | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | | CLD-AMT | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 199 | 0010 | 1189 | 31030 | | 2355 | 14923 |
| 199 | 0020 | 1008 | 31983 | | 2461 | 14871 |
| 199 | 0030 | 0868 | 32426 | | 2518 | 14827 |
| 199 | 0040 | 0805 | 32819 | | 2558 | 14809 |
| 199 | 0050 | 0611 | 33074 | | 2604 | 14738 |
| 199 | 0075 | 0420 | 33322 | | 2645 | 14667 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 1042 | WAVES 1 | XX | AIR T | | VIS |
| CONS. NO 055 | MONTH 7 | MXSAMPD 10 | WAVES 2 | XX | WET B | | STN |
| LAT 42-400N | DAY 07 | NO.DPTH 12 | WND-DIR | | WW-CODE | | |
| LON 63-280W | HR 17.7 | W-COLOR | WND-SPD | | CLD-TPE | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO | | CLD-AMT | | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 177 | 0000 | 1225 | 31259 | | 2366 | 14936 |
| 177 | 0010 | 1087 | 31995 | | 2448 | 14899 |
| 177 | 0020 | 0491 | 32366 | | 2562 | 14675 |
| 177 | 0050 | 0440 | 32968 | | 2615 | 14666 |
| 177 | 0075 | 0521 | 33509 | | 2649 | 14711 |
| 177 | 0100 | 0716 | 34054 | | 2667 | 14801 |
| 177 | 0150 | 0831 | 34701 | | 2701 | 14862 |
| 177 | 0200 | 0731 | 34685 | | 2715 | 14831 |
| 177 | 0300 | 0592 | 34807 | | 2743 | 14794 |
| 177 | 0498 | 0455 | 34881 | | 2765 | 14772 |
| 177 | 0744 | 0420 | 34906 | | 2771 | 14799 |
| 177 | 0991 | 0415 | 34928 | | 2773 | 14838 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1225 | 31259 | | 2366 | 14936 | 0000 | 00000 | 4239 |
| 0010 | 1087 | 31995 | | 2448 | 14899 | 0039 | 00002 | 3461 |
| 0020 | 0491 | 32366 | | 2562 | 14675 | 0068 | 00006 | 2376 |
| 0030 | 0320 I | 3261 F | | 2598 | 14607 | 0090 | 00012 | 2034 |
| 0050 | 0440 | 32968 | | 2615 | 14666 | 0130 | 00028 | 1874 |
| 0075 | 0521 | 33509 | | 2649 | 14711 | 0173 | 00055 | 1556 |
| 0100 | 0716 | 34054 | | 2667 | 14801 | 0210 | 00088 | 1392 |
| 0125 | 0810 B | 34456 | | 2685 | 14846 | 0243 | 00126 | 1229 |
| 0150 | 0831 | 34701 | | 2701 | 14862 | 0272 | 00167 | 1083 |
| 0175 | 0793 C | 3473 F | | 2709 | 14852 | 0298 | 00210 | 1010 |
| 0200 | 0731 | 34685 | | 2715 | 14831 | 0323 | 00258 | 0960 |
| 0225 | 0690 | 3471 B | | 2722 | 14820 | 0347 | 00309 | 0891 |
| 0250 | 0653 | 3474 B | | 2730 | 14810 | 0368 | 00362 | 0824 |
| 0300 | 0592 | 34807 | | 2743 | 14794 | 0407 | 00469 | 0700 |
| 0400 | 0505 | 3486 B | | 2758 | 14776 | 0471 | 00696 | 0565 |
| 0500 | 0454 | 34881 | | 2765 | 14772 | 0524 | 00943 | 0502 |
| 0600 | 0430 B | 34896 | | 2769 | 14779 | 0574 | 01221 | 0472 |
| *0700 | 0420 | 34904 | | 2771 | 14791 | 0621 | 01537 | 0465 |
| 0800 | 0396 D | 3492 B | | 2775 | 14798 | 0666 | 01887 | 0433 |
| 1000 | 0417 | 34928 | | 2773 | 14840 | 0758 | 02742 | 0474 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 122 | WAVES 1 XX | AIR T 15.0 | VIS 5 |
| CONS. NO 056 | MONTH 9 | MXSAMPD 01 | WAVES 2 3560 | WET B | STN |
| LAT 47-027N | DAY 06 | NO.DPTH 8 | WND-DIR 350 | WW-CODE 02 | |
| LON 60-220W | HR 21.4 | W-COLOR | WND-SPD 09 | CLD-TPE 8 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1005.0 | CLD-AMT 7 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 214 | 0000 | 1680 | 28910 | | 2092 | 15056 |
| 214 | 0025 | | 28820 | | | |
| 214 | 0050 | | 29037 | | | |
| 214 | 0060 | 0572 | 30522 | | 2408 | 14690 |
| 214 | 0070 | 0171 | 31202 | | 2498 | 14529 |
| 214 | 0080 | 0120 | 31490 | | 2524 | 14512 |
| 214 | 0090 | 0127 | 32607 | | 2613 | 14532 |
| 214 | 0100 | 0219 | 33449 | | 2674 | 14586 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1680 | 28910 | | 2092 | 15056 | 0000 | 00000 | 6862 |
| 0010 | 1431 I | 2835 I | | 2103 | 14972 | 0068 | 00003 | 6764 |
| 0020 | 1198 I | 2813 I | | 2129 | 14891 | 0135 | 00014 | 6510 |
| 0030 | 0979 I | 2865 I | | 2206 | 14820 | 0196 | 00029 | 5773 |
| 0050 | 0589 I | 29037 | | 2289 | 14676 | 0304 | 00072 | 4984 |
| 0075 | 0120 D | 3132 I | | 2510 | 14509 | 0403 | 00132 | 2868 |
| 0100 | 0219 | 33449 | | 2674 | 14586 | 0456 | 00177 | 1319 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 194 | WAVES 1 XX | AIR T 15.0 | VIS 5 | | |
| CONS. NO 057 | MONTH 9 | MXSAMPD 01 | WAVES 2 3560 | WET B | STN | | |
| LAT 47-074N | DAY 06 | NO.DPTH 9 | WND-DIR 340 | WW-CODE 62 | | | |
| LON 60-125W | HR 22.8 | W-COLOR | WND-SPD 07 | CLD-TPE 8 | | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1006.0 | CLD-AMT 8 | HW | | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 228 | 0000 | 1630 | 28990 | | 2110 | 15042 |
| 228 | 0050 | | 28897 | | | |
| 228 | 0076 | 1626 | 28928 | | 2106 | 15052 |
| 228 | 0101 | 0323 | 30933 | | 2465 | 14597 |
| 228 | 0111 | 0041 | 31468 | | 2526 | 14481 |
| 228 | 0121 | 0085 | 31816 | | 2552 | 14507 |
| 228 | 0131 | 0104 | 32405 | | 2598 | 14526 |
| 228 | 0141 | 0136 | 32937 | | 2639 | 14549 |
| 228 | 0150 | 0295 | 33861 | | 2700 | 14633 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1630 | 28990 | | 2110 | 15042 | 0000 | 00000 | 6696 |
| 0010 | 1762 I | 2863 I | | 2052 | 15080 | 0070 | 00004 | 7250 |
| 0020 | 1840 I | 2839 I | | 2016 | 15102 | 0144 | 00015 | 7603 |
| *0030 | 1863 I | 2827 I | | 2001 | 15109 | 0221 | 00035 | 7745 |
| 0050 | 1745 I | 28897 | | 2076 | 15084 | 0369 | 00094 | 7027 |
| 0075 | 1292 I | 2891 C | | 2172 | 14943 | 0533 | 00198 | 6109 |
| 0100 | 0373 C | 3084 D | | 2453 | 14618 | 0653 | 00300 | 3414 |
| 0125 | 0093 | 3204 C | | 2570 | 14515 | 0725 | 00381 | 2302 |
| 0150 | 0295 | 33861 | | 2700 | 14633 | 0767 | 00439 | 1072 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 250 | WAVES 1 XX | AIR T 15.0 | VIS 6 | | |
| CONS. NO 058 | MONTH 9 | MXSAMPD 02 | WAVES 2 3562 | WET B | STN | | |
| LAT 47-121N | DAY 07 | NO.DPTH 11 | WND-DIR 340 | WW-CODE 63 | | | |
| LON 60-045W | HR 00.5 | W-COLOR | WND-SPD 07 | CLD-TPE 4 | | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1006.1 | CLD-AMT 8 | HW | | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 005 | 0000 | 1610 | 29451 | | 2149 | 15041 |
| 005 | 0026 | 1641 | 29373 | | 2136 | 15054 |
| 005 | 0076 | 0553 | 30554 | | 2412 | 14685 |
| 005 | 0126 | 0164 | 31708 | | 2539 | 14542 |
| 005 | 0150 | 0086 | 32006 | | 2567 | 14515 |
| 005 | 0176 | 0126 | 32321 | | 2590 | 14542 |
| 005 | 0185 | 0107 | 32586 | | 2613 | 14539 |
| 005 | 0195 | 0156 | 32993 | | 2642 | 14568 |
| 005 | 0206 | 0302 | 33867 | | 2700 | 14645 |
| 005 | 0216 | 0385 | 34354 | | 2731 | 14689 |
| 005 | 0226 | 0398 | 34456 | | 2738 | 14698 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1610 | 29451 | | 2149 | 15041 | 0000 | 00000 | 6316 |
| 0010 | 1541 I | 2947 I | | 2166 | 15021 | 0063 | 00003 | 6161 |
| 0020 | 1463 I | 2952 I | | 2185 | 14998 | 0123 | 00012 | 5974 |
| 0030 | 1569 I | 2944 D | | 2157 | 15033 | 0185 | 00028 | 6249 |
| 0050 | 1169 I | 2983 I | | 2266 | 14907 | 0299 | 00074 | 5205 |
| *0075 | 0579 C | 3052 B | | 2407 | 14695 | 0413 | 00145 | 3859 |
| 0100 | 0304 F | 3116 F | | 2484 | 14592 | 0501 | 00222 | 3120 |
| 0125 | 0167 | 31689 | | 2537 | 14543 | 0573 | 00304 | 2615 |
| 0150 | 0086 | 32006 | | 2567 | 14515 | 0635 | 00391 | 2324 |
| 0175 | 0125 | 32303 | | 2589 | 14541 | 0691 | 00484 | 2122 |
| 0200 | 0220 B | 3339 G | | 2669 | 14602 | 0735 | 00567 | 1371 |
| 0225 | 0399 | 34459 | | 2738 | 14698 | 0762 | 00624 | 0728 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 457 | WAVES 1 XX | AIR T 11.7 | VIS 6 |
| CONS. NO 059 | MONTH 9 | MXSAMPD 04 | WAVES 2 3551 | WET B | STN |
| LAT 47-173N | DAY 07 | NO.DPTH 15 | WND-DIR 320 | WW-CODE 61 | |
| LON 59-561W | HR 02.0 | W-COLOR | WND-SPD 07 | CLD-TPE 4 | |
| MARSD SQ 150 | C/I 1810 | W-TRNSP | BARO 1005.9 | CLD-AMT 8 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 020 | 0000 | 1075 | | | | |
| 020 | 0050 | 1080 | 31204 | | 2388 | 14893 |
| 020 | 0098 | 0331 | 31725 | | 2527 | 14611 |
| 020 | 0145 | 0259 | 32176 | | 2569 | 14594 |
| 020 | 0170 | 0150 | 32287 | | 2586 | 14551 |
| 020 | 0193 | 0134 | 32387 | | 2595 | 14549 |
| 020 | 0239 | 0118 | 32541 | | 2608 | 14552 |
| 020 | 0283 | 0114 | 32674 | | 2619 | 14559 |
| 020 | 0306 | 0234 | 33444 | | 2672 | 14627 |
| 020 | 0329 | 0311 | 33916 | | 2703 | 14670 |
| 020 | 0337 | 0349 | 34139 | | 2717 | 14691 |
| 020 | 0346 | 0386 | 34382 | | 2733 | 14711 |
| 020 | 0355 | 0409 | 34507 | | 2741 | 14724 |
| 020 | 0364 | 0418 | 34616 | | 2748 | 14731 |
| 020 | 0372 | 0422 | 34742 | | 2758 | 14736 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1075 | 3044 I | | 2330 | 14873 | 0000 | 00000 | 4590 |
| 0010 | 1031 I | | | | | | | |
| 0020 | 0986 I | | | | | | | |
| *0030 | 0938 I | | | | | | | |
| 0050 | 1080 | 31204 | | 2388 | 14893 | 0217 | 00052 | 4042 |
| 0075 | 0693 I | 3152 D | | 2471 | 14754 | 0308 | 00109 | 3250 |
| 0100 | 0323 B | 31748 | | 2530 | 14608 | 0383 | 00175 | 2688 |
| 0125 | 0260 I | 3201 B | | 2556 | 14589 | 0448 | 00249 | 2441 |
| 0150 | 0235 B | 32202 | | 2573 | 14584 | 0507 | 00333 | 2275 |
| 0175 | 0143 | 32309 | | 2588 | 14549 | 0562 | 00425 | 2128 |
| 0200 | 0130 | 32413 | | 2597 | 14549 | 0615 | 00526 | 2042 |
| 0225 | 0121 | 32498 | | 2605 | 14550 | 0665 | 00636 | 1971 |
| 0250 | 0102 C | 3249 I | | 2605 | 14546 | 0715 | 00756 | 1963 |
| 0300 | 0201 B | 3323 E | | 2658 | 14608 | 0802 | 00997 | 1472 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 470 | WAVES 1 XX | AIR T 11.7 | VIS 6 |
| CONS. NO 060 | MONTH 9 | MXSAMPD 04 | WAVES 2 3551 | WET B | STN |
| LAT 47-219N | DAY 07 | NO.DPTH 15 | WND-DIR 320 | WW-CODE 16 | |
| LON 59-470W | HR 03.8 | W-COLOR | WND-SPD 06 | CLD-TPE 4 | |
| MARSD SQ 150 | C/I 1810 | W-TRNSP | BARO 1005.8 | CLD-AMT 6 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 038 | 0000 | 1170 | 31400 | | 2387 | 14919 |
| 038 | 0050 | 1178 | 31368 | | 2384 | 14930 |
| 038 | 0099 | 0448 | 32036 | | 2541 | 14665 |
| 038 | 0147 | 0318 | 32302 | | 2574 | 14621 |
| 038 | 0171 | 0201 | 32391 | | 2591 | 14575 |
| 038 | 0194 | 0156 | 32448 | | 2598 | 14560 |
| 038 | 0241 | 0101 | 32449 | | 2602 | 14543 |
| 038 | 0286 | 0150 | 32961 | | 2640 | 14580 |
| 038 | 0309 | 0297 | 33605 | | 2680 | 14657 |
| 038 | 0331 | 0435 | 34186 | | 2712 | 14727 |
| 038 | 0341 | 0384 | 34265 | | 2724 | 14708 |
| 038 | 0350 | 0400 | 34397 | | 2733 | 14718 |
| 038 | 0359 | 0419 | 34585 | | 2746 | 14730 |
| 038 | 0367 | 0421 | 34664 | | 2752 | 14733 |
| 038 | 0376 | 0423 | 34724 | | 2756 | 14736 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1170 | 31400 | | 2387 | 14919 | 0000 | 00000 | 4039 |
| 0010 | 1133 I | 3142 G | | 2396 | 14908 | 0040 | 00002 | 3964 |
| 0020 | 1092 I | 3144 I | | 2404 | 14895 | 0080 | 00008 | 3881 |
| *0030 | 1049 I | 3147 I | | 2414 | 14882 | 0118 | 00018 | 3789 |
| 0050 | 1178 | 31368 | | 2384 | 14930 | 0197 | 00051 | 4087 |
| 0075 | 0813 I | 3169 I | | 2468 | 14804 | 0290 | 00109 | 3280 |
| 0100 | 0443 | 32044 | | 2542 | 14663 | 0363 | 00173 | 2575 |
| 0125 | 0350 I | 3221 B | | 2564 | 14630 | 0426 | 00245 | 2363 |
| 0150 | 0302 | 32315 | | 2577 | 14615 | 0484 | 00326 | 2244 |
| 0175 | 0190 | 32403 | | 2592 | 14572 | 0538 | 00417 | 2090 |
| 0200 | 0145 | 3244 C | | 2598 | 14556 | 0590 | 00517 | 2033 |
| 0225 | 0111 | 3243 E | | 2600 | 14545 | 0641 | 00628 | 2018 |
| 0250 | 0094 B | 3249 C | | 2606 | 14542 | 0691 | 00750 | 1958 |
| 0300 | 0235 | 3334 B | | 2664 | 14624 | 0776 | 00987 | 1421 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 472 | WAVES 1 XX | AIR T 11.7 | VIS 2 |
| CONS. NO 061 | MONTH 9 | MXSAMPD 04 | WAVES 2 XX | WET B | STN |
| LAT 47-269N | DAY 07 | NO.DPTH 15 | WND-DIR 320 | WW-CODE 62 | |
| LON 59-355W | HR 05.0 | W-COLOR | WND-SPD 07 | CLD-TPE 5 | |
| MARSD SQ 150 | C/I 1810 | W-TRNSP | BARO 1005.5 | CLD-AMT 8 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 050 | 0000 | 1170 | 31191 | | 2371 | 14916 |
| 050 | 0050 | 1149 | 31170 | | 2373 | 14917 |
| 050 | 0100 | 0452 | 31817 | | 2523 | 14664 |
| 050 | 0148 | 0237 | 32101 | | 2565 | 14584 |
| 050 | 0173 | 0089 | 31916 | | 2560 | 14519 |
| 050 | 0196 | 0084 | 32371 | | 2597 | 14527 |
| 050 | 0244 | 0103 | 32719 | | 2623 | 14548 |
| 050 | 0291 | 0101 | 32986 | | 2645 | 14559 |
| 050 | 0315 | 0416 | 32891 | | 2612 | 14699 |
| 050 | 0338 | 0498 | 34341 | | 2718 | 14756 |
| 050 | 0347 | 0431 | 34279 | | 2720 | 14729 |
| 050 | 0357 | 0422 | 34438 | | 2734 | 14729 |
| 050 | 0366 | 0432 | | | | |
| 050 | 0375 | 0434 | 34688 | | 2752 | 14740 |
| 050 | 0383 | 0426 | 34782 | | 2761 | 14740 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1170 | 31191 | | 2371 | 14916 | 0000 | 00000 | 4193 |
| 0010 | 1136 I | 3121 F | | 2379 | 14906 | 0042 | 00002 | 4124 |
| 0020 | 1097 I | 3123 I | | 2387 | 14894 | 0083 | 00008 | 4045 |
| *0030 | 1055 I | 3126 I | | 2397 | 14881 | 0123 | 00019 | 3955 |
| 0050 | 1149 | 31170 | | 2373 | 14917 | 0205 | 00052 | 4183 |
| 0075 | 0813 I | 3147 I | | 2451 | 14800 | 0300 | 00112 | 3440 |
| 0100 | 0452 | 31817 | | 2523 | 14664 | 0378 | 00181 | 2755 |
| 0125 | 0318 G | 3204 D | | 2553 | 14614 | 0444 | 00256 | 2465 |
| 0150 | 0223 | 3208 B | | 2564 | 14577 | 0505 | 00342 | 2360 |
| 0175 | 0086 | 3195 B | | 2563 | 14519 | 0564 | 00441 | 2368 |
| 0200 | 0085 | 3242 B | | 2600 | 14529 | 0619 | 00546 | 2010 |
| 0225 | 0094 | 3263 F | | 2617 | 14540 | 0668 | 00652 | 1851 |
| 0250 | 0081 E | 3277 B | | 2629 | 14540 | 0713 | 00762 | 1738 |
| 0300 | 0220 F | 3286 I | | 2627 | 14612 | 0802 | 01011 | 1768 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 419 | WAVES 1 XX | AIR T 11.1 | VIS 2 |
| CONS. NO 062 | MONTH 9 | MXSAMPD 03 | WAVES 2 XX | WET B | STN |
| LAT 47-315N | DAY 07 | NO.DPTH 14 | WND-DIR 280 | WW-CODE 63 | |
| LON 59-286W | HR 07.4 | W-COLOR | WND-SPD 09 | CLD-TPE 5 | |
| MARSD SQ 150 | C/I 1810 | W-TRNSP | BARO 1005.2 | CLD-AMT 8 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 074 | 0000 | 1290 | 31140 | | 2345 | 14957 |
| 074 | 0050 | 1323 | 31100 | | 2335 | 14976 |
| 074 | 0100 | 0493 | 31629 | | 2504 | 14679 |
| 074 | 0124 | 0202 | 31931 | | 2554 | 14562 |
| 074 | 0148 | 0127 | 32143 | | 2576 | 14535 |
| 074 | 0196 | 0193 | 32351 | | 2588 | 14575 |
| 074 | 0244 | 0076 | 32671 | | 2621 | 14535 |
| 074 | 0267 | 0124 | 33004 | | 2645 | 14565 |
| 074 | 0290 | 0314 | 33707 | | 2686 | 14662 |
| 074 | 0300 | 0340 | 34074 | | 2713 | 14680 |
| 074 | 0309 | 0361 | 34221 | | 2723 | 14692 |
| 074 | 0319 | 0397 | 34341 | | 2729 | 14711 |
| 074 | 0328 | 0416 | 34496 | | 2739 | 14723 |
| 074 | 0337 | 0435 | 34647 | | 2749 | 14734 |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1290 | 31140 | | 2345 | 14957 | 0000 | 00000 | 4444 |
| 0010 | 1294 I | 3111 C | | 2342 | 14960 | 0045 | 00002 | 4474 |
| 0020 | 1282 I | 3110 E | | 2344 | 14957 | 0090 | 00009 | 4462 |
| *0030 | 1254 I | 3111 G | | 2349 | 14949 | 0134 | 00021 | 4409 |
| 0050 | 1323 | 31100 | | 2335 | 14976 | 0224 | 00058 | 4546 |
| 0075 | 0943 I | 3132 D | | 2420 | 14848 | 0328 | 00123 | 3743 |
| 0100 | 0493 | 31629 | | 2504 | 14679 | 0412 | 00197 | 2938 |
| 0125 | 0196 | 31941 | | 2555 | 14559 | 0480 | 00274 | 2443 |
| 0150 | 0129 | 32153 | | 2577 | 14537 | 0539 | 00357 | 2238 |
| 0175 | 0158 F | 3227 C | | 2584 | 14555 | 0594 | 00449 | 2167 |
| 0200 | 0181 B | 32366 | | 2590 | 14571 | 0648 | 00552 | 2112 |
| 0225 | 0116 F | 3251 C | | 2606 | 14548 | 0699 | 00664 | 1960 |
| 0250 | 0078 | 3273 B | | 2626 | 14538 | 0746 | 00778 | 1765 |
| 0300 | 0340 | 34074 | | 2713 | 14680 | 0815 | 00967 | 0964 |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 137 | WAVES 1 XX | AIR T 11.1 | VIS 6 |
| CONS. NO 063 | MONTH 9 | MXSAMPD 01 | WAVES 2 XX | WET B | STN |
| LAT 47-368N | DAY 07 | NO.DPTH 7 | WND-DIR 120 | WW-CODE 02 | |
| LON 59-202W | HR 08.7 | W-COLOR | WND-SPD 07 | CLD-TPE 3 | |
| MARSD SQ 150 | C/I 1810 | W-TRNSP | BARO 1004.9 | CLD-AMT 4 | HW |

OBSERVED

| GMT | DEPTH | TEMP | SAL | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 087 | 0000 | 1100 | 31238 | | 2387 | 14892 |
| 087 | 0026 | 1090 | 31240 | | 2389 | 14893 |
| 087 | 0035 | 1091 | 31420 | | 2403 | 14897 |
| 087 | 0045 | 0957 | 31627 | | 2441 | 14852 |
| 087 | 0056 | 0728 | 31787 | | 2488 | 14769 |
| 087 | 0066 | 0546 | 31951 | | 2523 | 14699 |
| 087 | 0076 | 0163 | 32478 | | 2600 | 14544 |

INTERPOLATED

| DEPTH | TEMP | SAL | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1100 | 31238 | | 2387 | 14892 | 0000 | 00000 | 4040 |
| 0010 | 1145 F | 3119 C | | 2375 | 14909 | 0041 | 00002 | 4157 |
| 0020 | 1146 H | 3121 D | | 2377 | 14911 | 0083 | 00009 | 4141 |
| 0030 | 1097 B | 31314 | | 2394 | 14897 | 0124 | 00019 | 3985 |
| 0050 | 0856 B | 31703 | | 2463 | 14816 | 0197 | 00048 | 3328 |
| 0075 | 0201 B | 32423 | | 2593 | 14560 | 0265 | 00090 | 2082 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH | 168 | WAVES 1 | XX | AIR T | | VIS | 7 |
| CONS. NO 064 | MONTH 9 | MXSAMPD | 01 | WAVES 2 | XX | WET B | | STN | |
| LAT 47-052N | DAY 07 | NO.DPTH | 7 | WND-DIR | 320 | WW-CODE | 01 | | |
| LON 60-173W | HR 15.6 | W-COLOR | | WND-SPD | 12 | CLD-TPE | 3 | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | | BARO | 1007.3 | CLD-AMT | 5 | HW | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 156 | 0000 | 1590 | | | | |
| 156 | 0025 | 1621 | | | | |
| 156 | 0050 | 1602 | | | | |
| 156 | 0060 | 0982 | | | | |
| 156 | 0070 | 0348 | | | | |
| 156 | 0080 | 0181 | | | | |
| 156 | 0090 | 0066 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1590 | | | | | | | |
| 0010 | 1829 I | | | | | | | |
| 0020 | 1932 I | | | | | | | |
| 0030 | 1707 I | | | | | | | |
| 0050 | 1602 | | | | | | | |
| 0075 | 0232 F | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 120 | WAVES 1 0762 | AIR T 16.7 | VIS 7 |
| CONS. NO 065 | MONTH 9 | MXSAMPD 01 | WAVES 2 1402 | WET B | STN |
| LAT 43-010N | DAY 13 | NO.DPTH 8 | WND-DIR 080 | WW-CODE 02 | |
| LON 62-543W | HR 12.0 | W-COLOR | WND-SPD 10 | CLD-TPE 4 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1021.2 | CLD-AMT 8 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 120 | 0000 | 1640 | | | | |
| 120 | 0025 | 1535 | | | | |
| 120 | 0050 | 1535 | | | | |
| 120 | 0060 | 1047 | | | | |
| 120 | 0070 | 0791 | | | | |
| 120 | 0080 | 0496 | | | | |
| 120 | 0090 | 0579 | | | | |
| 120 | 0100 | 0718 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1640 | | | | | | | |
| 0010 | 1776 I | | | | | | | |
| 0020 | 1819 I | | | | | | | |
| 0030 | 1601 I | | | | | | | |
| 0050 | 1535 | | | | | | | |
| 0075 | 0622 F | | | | | | | |
| 0100 | 0718 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 145 | WAVES 1 0751 | AIR T 16.7 | VIS 7 |
| CONS. NO 066 | MONTH 9 | MXSAMPD 01 | WAVES 2 1401 | WET B | STN |
| LAT 43-122N | DAY 13 | NO.DPTH 8 | WND-DIR 070 | WW-CODE 02 | |
| LON 63-202W | HR 15.6 | W-COLOR | WND-SPD 05 | CLD-TPE 4 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1023.0 | CLD-AMT 8 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 156 | 0000 | 1680 | | | | |
| 156 | 0025 | 1181 | | | | |
| 156 | 0050 | 0867 | | | | |
| 156 | 0060 | 0357 | | | | |
| 156 | 0070 | 0275 | | | | |
| 156 | 0080 | 0260 | | | | |
| 156 | 0090 | 0386 | | | | |
| 156 | 0100 | 0524 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1680 | | | | | | | |
| 0010 | 1619 I | | | | | | | |
| 0020 | 1494 I | | | | | | | |
| 0030 | 1166 I | | | | | | | |
| 0050 | 0867 | | | | | | | |
| 0075 | 0255 | | | | | | | |
| 0100 | 0524 | | | | | | | |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 184 | WAVES 1 1851 | AIR T 13.3 | VIS 2 |
| CONS. NO 067 | MONTH 9 | MXSAMPD 01 | WAVES 2 XX | WET B | STN |
| LAT 43-576N | DAY 19 | NO.DPTH 9 | WND-DIR 180 | WW-CODE 42 | |
| LON 63-406W | HR 09.7 | W-COLOR | WND-SPD 09 | CLD-TPE X | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1005.2 | CLD-AMT 9 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 097 | 0000 | 1440 | | | | |
| 097 | 0010 | 1434 | | | | |
| 097 | 0020 | 1194 | | | | |
| 099 | 0030 | 0584 | | | | |
| 099 | 0040 | 0404 | | | | |
| 099 | 0050 | 0334 | | | | |
| 099 | 0075 | 0457 | | | | |
| 099 | 0100 | 0493 | | | | |
| 099 | 0150 | 0497 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1440 | | | | | | | |
| 0010 | 1434 | | | | | | | |
| 0020 | 1194 | | | | | | | |
| 0030 | 0584 | | | | | | | |
| 0050 | 0334 | | | | | | | |
| 0075 | 0457 | | | | | | | |
| 0100 | 0493 | | | | | | | |
| 0125 | 0526 C | | | | | | | |
| 0150 | 0497 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 168 | WAVES 1 1851 | AIR T 13.9 | VIS 1 |
| CONS. NO 068 | MONTH 9 | MXSAMPD 01 | WAVES 2 XX | WET B | STN |
| LAT 44-050N | DAY 19 | NO.DPTH 9 | WND-DIR 180 | WW-CODE 42 | |
| LON 63-448W | HR 11.4 | W-COLOR | WND-SPD 07 | CLD-TPE X | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1005.8 | CLD-AMT 9 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 114 | 0000 | 1460 | | | | |
| 114 | 0010 | 1460 | | | | |
| 114 | 0020 | 1185 | | | | |
| 114 | 0030 | 0528 | | | | |
| 114 | 0040 | 0323 | | | | |
| 114 | 0050 | 0246 | | | | |
| 114 | 0075 | 0259 | | | | |
| 114 | 0100 | 0342 | | | | |
| 114 | 0150 | 0369 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1460 | | | | | | | |
| 0010 | 1460 | | | | | | | |
| 0020 | 1185 | | | | | | | |
| 0030 | 0528 | | | | | | | |
| 0050 | 0246 | | | | | | | |
| 0075 | 0259 | | | | | | | |
| 0100 | 0342 | | | | | | | |
| 0125 | 0342 E | | | | | | | |
| 0150 | 0369 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 142 | WAVES 1 1851 | AIR T 13.9 | VIS 1 |
| CONS. NO 069 | MONTH 9 | MXSAMPD 01 | WAVES 2 XX | WET B | STN |
| LAT 44-111N | DAY 19 | NO.DPTH 8 | WND-DIR 180 | WW-CODE 42 | |
| LON 63-480W | HR 13.3 | W-COLOR | WND-SPD 07 | CLD-TPE X | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1005.8 | CLD-AMT 9 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 133 | 0000 | 1480 | | | | |
| 133 | 0010 | 1449 | | | | |
| 133 | 0020 | 0970 | | | | |
| 133 | 0030 | 0581 | | | | |
| 133 | 0040 | 0479 | | | | |
| 133 | 0050 | 0357 | | | | |
| 133 | 0075 | 0254 | | | | |
| 133 | 0100 | 0302 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1480 | | | | | | | |
| 0010 | 1449 | | | | | | | |
| 0020 | 0970 | | | | | | | |
| 0030 | 0581 | | | | | | | |
| 0050 | 0357 | | | | | | | |
| 0075 | 0254 | | | | | | | |
| 0100 | 0302 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 98 | WAVES 1 2150 | AIR T 17.8 | VIS 6 |
| CONS. NO 070 | MONTH 9 | MXSAMPD 01 | WAVES 2 2151 | WET B | STN |
| LAT 44-174N | DAY 19 | NO.DPTH 7 | WND-DIR 290 | WW-CODE 02 | |
| LON 63-515W | HR 14.7 | W-COLOR | WND-SPD 04 | CLD-TPE 9 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1007.2 | CLD-AMT 1 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 147 | 0000 | 1600 | | | | |
| 147 | 0010 | 1555 | | | | |
| 147 | 0020 | 0923 | | | | |
| 147 | 0030 | 0520 | | | | |
| 147 | 0040 | 0458 | | | | |
| 147 | 0050 | 0389 | | | | |
| 147 | 0075 | 0277 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1600 | | | | | | | |
| 0010 | 1555 | | | | | | | |
| 0020 | 0923 | | | | | | | |
| 0030 | 0520 | | | | | | | |
| 0050 | 0389 | | | | | | | |
| 0075 | 0277 | | | | | | | |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 50 | WAVES 1 3650 | AIR T 23.3 | VIS 6 | | |
| CONS. NO 071 | MONTH 9 | MXSAMPD 00 | WAVES 2 3650 | WET B | STN | | |
| LAT 44-241N | DAY 19 | NO.DPTH 5 | WND-DIR 330 | WW-CODE 02 | | | |
| LON 63-550W | HR 15.9 | W-COLOR | WND-SPD 07 | CLD-TPE 9 | | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1007.6 | CLD-AMT 1 | HW | | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 159 | 0000 | 1390 | | | | |
| 159 | 0010 | 1349 | | | | |
| 159 | 0020 | 1082 | | | | |
| 159 | 0030 | 0932 | | | | |
| 159 | 0040 | 0725 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1390 | | | | | | | |
| 0010 | 1349 | | | | | | | |
| 0020 | 1082 | | | | | | | |
| 0030 | 0932 | | | | | | | |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 54 | WAVES 1 3351 | AIR T 20.0 | VIS 6 |
| CONS. NO 072 | MONTH 9 | MXSAMPD 00 | WAVES 2 3351 | WET B | STN |
| LAT 44-293N | DAY 19 | NO.DPTH 6 | WND-DIR 350 | WW-CODE 03 | |
| LON 63-576W | HR 16.8 | W-COLOR | WND-SPD 06 | CLD-TPE 9 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1008.4 | CLD-AMT 2 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 168 | 0000 | 1440 | | | | |
| 168 | 0010 | 1171 | | | | |
| 168 | 0020 | 1031 | | | | |
| 168 | 0030 | 0951 | | | | |
| 168 | 0040 | 0565 | | | | |
| 168 | 0050 | 0295 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1440 | | | | | | | |
| 0010 | 1171 | | | | | | | |
| 0020 | 1031 | | | | | | | |
| 0030 | 0951 | | | | | | | |
| 0050 | 0295 | | | | | | | |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 64 | WAVES 1 3451 | AIR T 19.4 | VIS 9 |
| CONS. NO 073 | MONTH 9 | MXSAMPD 00 | WAVES 2 0351 | WET B | STN |
| LAT 44-329N | DAY 19 | NO.DPTH 6 | WND-DIR 340 | WW-CODE 02 | |
| LON 63-594W | HR 17.4 | W-COLOR | WND-SPD 08 | CLD-TPE 9 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1008.6 | CLD-AMT 1 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 174 | 0000 | 1370 | | | | |
| 174 | 0010 | 1131 | | | | |
| 174 | 0020 | 1033 | | | | |
| 174 | 0030 | 0730 | | | | |
| 174 | 0040 | 0329 | | | | |
| 174 | 0050 | 0283 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1370 | | | | | | | |
| 0010 | 1131 | | | | | | | |
| 0020 | 1033 | | | | | | | |
| 0030 | 0730 | | | | | | | |
| 0050 | 0283 | | | | | | | |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 50 | WAVES 1 1260 | AIR T 18.9 | VIS 7 |
| CONS. NO 074 | MONTH 9 | MXSAMPD 00 | WAVES 2 1260 | WET B | STN |
| LAT 44-329N | DAY 21 | NO.DPTH 6 | WND-DIR 120 | WW-CODE 03 | |
| LON 63-594W | HR 17.2 | W-COLOR | WND-SPD 05 | CLD-TPE 9 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1017.2 | CLD-AMT 3 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 172 | 0000 | 1410 | | | | |
| 172 | 0010 | 1296 | | | | |
| 172 | 0020 | 1155 | | | | |
| 172 | 0030 | 0788 | | | | |
| 172 | 0040 | 0572 | | | | |
| 172 | 0050 | 0309 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1410 | | | | | | | |
| 0010 | 1296 | | | | | | | |
| 0020 | 1155 | | | | | | | |
| 0030 | 0788 | | | | | | | |
| 0050 | 0309 | | | | | | | |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 40 | WAVES 1 1260 | AIR T 18.9 | VIS 7 | | |
| CONS. NO 075 | MONTH 9 | MXSAMPD 00 | WAVES 2 1260 | WET B | STN | | |
| LAT 44-298N | DAY 21 | NO.DPTH 5 | WND-DIR 120 | WW-CODE 03 | | | |
| LON 63-576W | HR 17.9 | W-COLOR | WND-SPD 05 | CLD-TPE 9 | | | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1017.2 | CLD-AMT 6 | HW | | |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 179 | 0000 | 1490 | | | | |
| 179 | 0010 | 1392 | | | | |
| 179 | 0020 | 1251 | | | | |
| 179 | 0030 | 1159 | | | | |
| 179 | 0040 | 0900 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1490 | | | | | | | |
| 0010 | 1392 | | | | | | | |
| 0020 | 1251 | | | | | | | |
| 0030 | 1159 | | | | | | | |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 50 | WAVES 1 1251 | AIR T 17.8 | VIS 7 |
| CONS. NO 076 | MONTH 9 | MXSAMPD 00 | WAVES 2 1251 | WET B | STN |
| LAT 44-243N | DAY 21 | NO.DPTH 6 | WND-DIR 130 | WW-CODE 01 | |
| LON 63-546W | HR 18.8 | W-COLOR | WND-SPD 03 | CLD-TPE 5 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1016.5 | CLD-AMT 3 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 188 | 0000 | 1550 | | | | |
| 188 | 0010 | 1356 | | | | |
| 188 | 0020 | 1294 | | | | |
| 188 | 0030 | 1092 | | | | |
| 188 | 0040 | 0970 | | | | |
| 188 | 0050 | 0564 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1550 | | | | | | | |
| 0010 | 1356 | | | | | | | |
| 0020 | 1294 | | | | | | | |
| 0030 | 1092 | | | | | | | |
| 0050 | 0564 | | | | | | | |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 95 | WAVES 1 1451 | AIR T 19.4 | VIS 7 |
| CONS. NO 077 | MONTH 9 | MXSAMPD 01 | WAVES 2 1451 | WET B | STN |
| LAT 44-173N | DAY 21 | NO.DPTH 7 | WND-DIR 130 | WW-CODE 03 | |
| LON 63-510W | HR 19.9 | W-COLOR | WND-SPD 02 | CLD-TPE 5 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1015.9 | CLD-AMT 3 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 199 | 0000 | 1630 | | | | |
| 199 | 0010 | 1527 | | | | |
| 199 | 0020 | 0951 | | | | |
| 199 | 0030 | 0782 | | | | |
| 199 | 0040 | 0627 | | | | |
| 199 | 0050 | 0515 | | | | |
| 199 | 0075 | 0371 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1630 | | | | | | | |
| 0010 | 1527 | | | | | | | |
| 0020 | 0951 | | | | | | | |
| 0030 | 0782 | | | | | | | |
| 0050 | 0515 | | | | | | | |
| 0075 | 0371 | | | | | | | |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 137 | WAVES 1 1551 | AIR T 18.9 | VIS 7 |
| CONS. NO 078 | MONTH 9 | MXSAMPD 01 | WAVES 2 1551 | WET B | STN |
| LAT 44-110N | DAY 21 | NO.DPTH 8 | WND-DIR 170 | WW-CODE 03 | |
| LON 63-480W | HR 20.9 | W-COLOR | WND-SPD 05 | CLD-TPE 9 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1016.5 | CLD-AMT 4 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 209 | 0000 | 1630 | | | | |
| 209 | 0010 | 1556 | | | | |
| 209 | 0020 | 1520 | | | | |
| 209 | 0030 | 0825 | | | | |
| 209 | 0040 | 0402 | | | | |
| 209 | 0050 | 0354 | | | | |
| 209 | 0075 | 0262 | | | | |
| 209 | 0100 | 0266 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1630 | | | | | | | |
| 0010 | 1556 | | | | | | | |
| 0020 | 1520 | | | | | | | |
| 0030 | 0825 | | | | | | | |
| 0050 | 0354 | | | | | | | |
| 0075 | 0262 | | | | | | | |
| 0100 | 0266 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 165 | WAVES 1 1551 | AIR T 18.9 | VIS 7 |
| CONS. NO 079 | MONTH 9 | MXSAMPD 01 | WAVES 2 1551 | WET B | STN |
| LAT 44-050N | DAY 21 | NO.DPTH 9 | WND-DIR 160 | WW-CODE 02 | |
| LON 63-447W | HR 22.0 | W-COLOR | WND-SPD 06 | CLD-TPE 9 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1014.6 | CLD-AMT 3 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 220 | 0000 | 1630 | | | | |
| 220 | 0010 | 1578 | | | | |
| 220 | 0020 | 1481 | | | | |
| 220 | 0030 | 0482 | | | | |
| 220 | 0040 | 0278 | | | | |
| 220 | 0050 | 0172 | | | | |
| 220 | 0075 | 0240 | | | | |
| 220 | 0100 | 0302 | | | | |
| 220 | 0150 | 0583 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1630 | | | | | | | |
| 0010 | 1578 | | | | | | | |
| 0020 | 1481 | | | | | | | |
| 0030 | 0482 | | | | | | | |
| 0050 | 0172 | | | | | | | |
| 0075 | 0240 | | | | | | | |
| 0100 | 0302 | | | | | | | |
| 0125 | 0435 C | | | | | | | |
| 0150 | 0583 | | | | | | | |

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|---|---|---|---|---|---|---|---|
| C-REF-NO 007 | YR 1967 | DEPTH 190 | WAVES 1 1551 | AIR T 14.6 | VIS 7 |
| CONS. NO 080 | MONTH 9 | MXSAMPD 01 | WAVES 2 1551 | WET B | STN |
| LAT 43-576N | DAY 21 | NO.DPTH 9 | WND-DIR 160 | WW-CODE 03 | |
| LON 63-406W | HR 23.2 | W-COLOR | WND-SPD 09 | CLD-TPE 8 | |
| MARSD SQ 151 | C/I 1810 | W-TRNSP | BARO 1014.4 | CLD-AMT 4 | HW |

O B S E R V E D

| GMT | DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND |
|---|---|---|---|---|---|---|
| 232 | 0000 | 1670 | | | | |
| 232 | 0010 | 1505 | | | | |
| 232 | 0020 | 1126 | | | | |
| 232 | 0030 | 0707 | | | | |
| 232 | 0040 | 0352 | | | | |
| 232 | 0050 | 0315 | | | | |
| 232 | 0075 | 0431 | | | | |
| 232 | 0100 | 0506 | | | | |
| 232 | 0150 | 0567 | | | | |

I N T E R P O L A T E D

| DEPTH | T E M P | S A L | OXYGEN | SGMT | SOUND | DELTA-D | POT.EN | SVA |
|---|---|---|---|---|---|---|---|---|
| 0000 | 1670 | | | | | | | |
| 0010 | 1505 | | | | | | | |
| 0020 | 1126 | | | | | | | |
| 0030 | 0707 | | | | | | | |
| 0050 | 0315 | | | | | | | |
| 0075 | 0431 | | | | | | | |
| 0100 | 0506 | | | | | | | |
| 0125 | 0555 | | | | | | | |
| 0150 | 0567 | | | | | | | |

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